



Mr. Mark Verhey
Humboldt County Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

April 17, 2006

Re: **First Quarter 2006 Groundwater Monitoring /
Remedial System Operations Report and
Workplan for Additional Soil Assessment**
Former Central BP Station
2160 Central Avenue
McKinleyville, California
LOP # 12692
Blue Rock Project No. NC-24

Dear Mr. Verhey,

This report was prepared for the Louise Pierson Revocable Trust by Blue Rock Environmental, Inc. (Blue Rock), and presents the results of the First Quarter 2006 groundwater monitoring and soil vapor extraction (SVE) operational data for activities performed at the Former Central BP Station located at 2160 Central Avenue in McKinleyville, Humboldt County, California (site) (Figure 1).

This report also contains a Workplan, prepared in response to requests contained in the HCDEH letter dated March 22, 2006, for additional soil assessment activities, and it also provides a discussion of site conditions.

The report is organized into the following sections:

- **Background**
- **Groundwater Monitoring Event – First Quarter 2006**
- **Soil Vapor Extraction and Air-Sparge Remediation System Operations**
- **Workplan for Additional Soil Assessment**
- **Evaluation of MTBE Concentrations in Groundwater between 15-25 ft bgs**
- **Project Status**

Background

Site Description

The former Central BP Service Station is located in the unincorporated town of McKinleyville, California (Figure 1). The site is level and gravel surfaced, and the lot is approximately 0.5-acre. All former service station structures, including the fueling system, have been removed. The site is approximately 150 feet above mean sea level. Nearby property use is commercial.

Site and UST History

The Louise Pierson Trust has owned the property since 1956. A service station was constructed on the site in 1959. The original station included one 1,000-gallon used oil, two 5,000-gallon gasoline, and one 10,000-gallon gasoline underground storage tanks (USTs). In 1972, the station was remodeled, which included relocating the 1,000-gallon used oil tank 15 feet to the west, and installation of an additional 2,000-gallon gasoline UST was installed on the west side of the existing USTs.

In November 1990, the used oil tank and the 2,000-gallon UST were removed from the site. In August 1991, SHN Consulting Engineers excavated approximately 40 cubic yards of impacted soil from the 2,000-gallon UST pit.

In August 1998, Albers Construction of Eureka, California removed the remaining 5,000-gallon and 10,000-gallon USTs and overexcavated approximately 340 cubic yards of contaminated soil. Additionally, 200 cubic yards of contaminated tank fill was removed, remediated on site, and backfilled into the excavation per HCDEH approval. Soil samples collected from the UST excavations contained detectable levels of gasoline range hydrocarbons.

Site Investigation History

Site investigation has been ongoing since July 1999. A total of approximately 15 borings (B-1 through B-4, B-A through B-H, and SVB-1 through SVB-3) have been drilled and 12 monitoring wells (MW-1 through MW-12) installed at the site (Figure 2). Also, six vapor extraction wells (VEW-1 through VEW-6) and six air-sparge wells (SW-1 through SW-6) have been installed at the site (Figure 2). A summary of well construction details are included in Table 1 and cumulative groundwater monitoring data are included in Table 2.

Hydrogeology

Cumulative investigation has indicated that the subsurface is composed primarily of material classified as silty or clayey sands (SM - SC) to depths ranging from approximately 5 to 25 feet bgs, based on previous laboratory analysis for particle size analysis. Additionally, material classified as organic soil (OL-OH) and elastic silt (MH-ML) have been observed at depths ranging from approximately 2 to 5 feet bgs. Site cross sections are presented in Figures 2a and 2b. Groundwater appears to occur in unconfined conditions with depth to water fluctuating between approximately 7 to 19 feet over the span of the annual hydrologic cycle. Groundwater flow direction has ranged from northwest to east.

Contaminant Type

The predominant contaminants detected in the subsurface around the former UST system consist of total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethyl-benzene, xylene (BTEX). Low levels of fuel oxygenates (i.e. MTBE) and TPH as diesel (TPHd), relative to TPHg, have also been detected.

Remediation History

In April 2004, Sustainable Technologies of Alameda, California installed a soil vapor extraction/air sparge system (SVE/AS), which consisted of a grid of six vapor extraction and six air-sparge wells plumbed to a catalytic oxidizer and sparge blower. The SVE/AS system became operational in July 2004, and has operated nearly continuously from that time to the present (~21 months).

Groundwater Monitoring Event – First Quarter 2006

Groundwater Monitoring Activities

On March 6, 2006 twelve wells (MW-1 to MW-12) were gauged and were sampled. The SVE/AS Remediation System was turned off prior to monitoring and restarted afterward.

Prior to sampling, an electronic water level indicator was used to gauge depth to water in each well, accurate to within ± 0.01 -foot. All wells were checked for the presence of light non-aqueous phase liquid (LNAPL) petroleum prior to purging. No measurable thicknesses of LNAPL were observed on groundwater in any of the wells.

In preparation for sampling, the wells were purged of groundwater until sampling parameters (temperature, pH, and conductivity) stabilized. The pH / temp / conductivity meter failed in the during well purging activities. Therefore, wells MW-4 through MW-12 were subsequently purged of three wetted casing volumes without the measurement of sampling parameters. A downhole Dissolved Oxygen (DO) meter was used to measure DO concentrations in groundwater after the wells were purged. DO concentrations recorded this quarter are listed in the text below.

Following recovery of water levels to approximately 80% of their static levels, groundwater samples were collected from the wells using disposable polyethylene bailers and transferred to laboratory supplied containers. Sample containers were labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

Purging instruments were cleaned between use by an Alconox® wash followed by double rinse in clean tap water to prevent cross-contamination. Purge and rinseate water was stored on-site in labeled 55-gallon drums pending future removal and disposal.

Groundwater monitoring and well purging information is presented on Gauge Data/Purge Calculations and Purge Data sheets (attached).

Groundwater samples were analyzed by Kiff Analytical (Kiff), a DHS-certified laboratory, located in Davis, California, for the following analytes:

- TPHd by EPA Method 3510/8015M (MW-7 Only).
- TPHg, BTEX, MTBE by EPA Method 5030/8260B (all wells).

Groundwater Monitoring Results

Static groundwater in the wells was present beneath the site at depths ranging from approximately 6.69 (MW-3) to 9.54 (MW-7) feet bgs. Gauging data, combined with well elevation data, were used to calculate groundwater elevations, and to generate a groundwater elevation and gradient map. On the west side of the site, groundwater flow is toward the east at a gradient of 0.03 ft/ft, and it becomes more north-northeast in the area of the former UST system and downgradient of the site at 0.004 ft/ft (Figure 3). Historic groundwater flow direction and gradient are shown in Figure 4. The groundwater gradient and flow direction for this quarter is consistent with previous measurements.

The following section summarizes groundwater sample analytical results:

LNAPL:	None
TPHd concentration:	< 1,500 µg/L (MW-7)
TPHg concentration:	<50 µg/L (numerous wells) to 6,500 µg/L (MW-7)
Benzene concentration:	<0.50 µg/L (numerous wells) to 21 µg/L (MW-5)
MTBE Concentration:	<0.50 µg/L (numerous wells) to <1 µg/L (MW-7)

Groundwater sample analytical results are shown graphically on Figure 5. Cumulative groundwater sample analytical results are summarized in Table 2. Copies of the laboratory report and chain-of-custody form are attached.

The extent of dissolved-phase contamination remains delineated. The magnitude and distribution of dissolved-phase contaminants detected during this event have diminished compared to previous sampling events. Dissolved oxygen concentrations in groundwater ranged from 0.89 mg/L (MW-5) to 11.37 mg/L (MW-6) (See attached field notes).

Soil Vapor Extraction and Air-Sparge Remediation System Operations

Background

The soil vapor extraction system design includes six wells plumbed for vapor extraction VEW-1 to VEW-6 (Figure 6). The remediation system was constructed in April 2004 in accordance with Clearwater's *RAP* dated September 3, 2003. The system was tested on July 6 through July 9, 2004 for initial compliance according to the North Coast Unified Air Quality Management District (NCUAQMD) authority to construct (ATC) permit #NAC-380 (Attached). Effluent results of the verification testing indicated that the system was operating within compliance of the permit. Thus, according to the ATC permit weekly compliance monitoring was initiated. The interval for the monitoring of the system and the collection influent and effluent air samples was reduced to monthly from weekly beginning in August 2004 as system compliance with the NCUAQMD ATC permit had been demonstrated.

The air sparge injection system design includes five wells plumbed for sparging: SW-1 to SW-6 (Figure 8). The air sparge system was constructed in April 2004.

SVE Operational Data

Petroleum hydrocarbon vapors extracted from soil and groundwater are treated by a 250 scfm Solleco 250 ECAT catalytic oxidizer (catox).

In accordance with the NCAQMD ATC permit, the influent and effluent air streams for the catox unit were analyzed for contaminant concentrations (TPHg, BTEX and MTBE) during the first four days of startup and weekly thereafter. Sampling intervals were changed to monthly once compliance had been demonstrated. Catox operational data and analytical results for influent and effluent samples, and compliance data are presented on Tables 3, 4, 5 and 6. The soil vapor extraction process flow diagram is shown on Figure 7. Individual vapor well analytical results of vapor samples collected from the catox influent streams, during startup of the system in July 2004 are presented on Table 3. The following is a summary of the operational data and analytical results of samples from the soil vapor extraction process stream for this monitoring period:

- Total Operation: System started on July 6, 2004 to present
- Current Period of Operation: December 20, 2005 to March 21, 2006
- Monitoring Dates: 1/24/06, 2/24/06, 3/21/06
- Total Operational Hours: 10,786 hours to date
- Period Operational Hours: 1,515 Hours
- Period System running time: 70%
- Period Average influent air flow rate: 265 scfm
- Period Average influent air TPHg: 158 mg/m³
- Period Average effluent air TPHg: <20 mg/m³
- Period Average Destruction efficiency: >64 %,
- Period Average TPHg recovery rate: 4.5 lb/day
- Total TPHg recovery: 12,486 lb (2,054 gal) to date
- Operating wells: VEW-2 through VEW-6
- Analytes tested: TPHg, BTEX, MTBE
- Analytical methods: EPA Method 8260B
- Laboratory: Kiff Analytical LLC, Davis, California

The TPHg recovery rate is based on analytical influent air sample results and concurrently measured air flow. The average TPHg recovery rate for each month is multiplied by hours of operation for that period to calculate TPHg removal for the period between each sampling event.

Air-Sparge Operational Data

- Startup date: Started on December 1, 2004
- Operational time: On 24 hrs / day 7 days / week; off with SVE system shutdown
- Injection air flow rate: Approximately 2 to 3 scfm

The air sparge system was started following the installation of interlocks between the SVE and Sparge systems in early December 2004. The sparge system was subsequently shut down in mid December due to the added influent hydrocarbon concentrations originating from sparge system operation causing the system to shut down. When influent concentrations from SVE system operation began to diminish, the sparge system was restarted to remediate residual dissolved hydrocarbons.

In August 2005, the original 3-hp sparge pump had worn to the point that it no longer could pump a sufficient amount of air into the ground to produce a remedial effect. That pump was subsequently replaced with a 7.5-hp pump in an effort to resume effective groundwater remediation through air sparging. Additionally, the larger sparge pump has increased the rate of air flow into the subsurface thus increasing volatilization (stripping) of dissolved-phase hydrocarbons from dissolved phase to vapor phase for recovery through the catalytic oxidizer. Additionally, through operation of the sparge system, dissolved oxygen concentrations in site monitoring wells have increased to levels ranging as high as 10.85 mg/L.

Soil Vapor Extraction and Air-Sparge Remedial System Status

The soil vapor extraction system is configured to concentrate extracting vapor from wells VEW-1 to VEW-6. The catox has been in operation since July 6, 2004. The soil vapor extraction system is operating as designed, recovering hydrocarbon vapor from the area of soil contamination at significant rates. An estimated 12,486 lb (2,054 gal) of hydrocarbons have been recovered from the subsurface.

The TPHg recovery rates observed for the much of the first quarter 2006 are interpreted to represent the amount of air-sparge volatilization of contaminants in the saturated zone. This interpretation is based on the fact that depth to water for the quarter ranged between about 7 to 10 ft bgs, submerging the majority of documented sorbed-phase contamination at the site, which has been detected at depths ranging from 10 to 25 ft bgs. These data show that the air-sparge component of the system is capable of volatilizing submerged contaminant mass for capture and treatment by the soil vapor extraction portion of the system at rates of 4-5 lbs/day (Table 4).

There appears to be correlation between the lower groundwater elevations that occur in summer and fall and higher TPHg recovery rates (Charts 1 and 2). The higher TPHg influent concentrations in the fall, and thus higher TPHg extraction rates, likely result from the fact that the lower groundwater conditions increase the length of gasoline impacted soil column to the affects of vapor extraction. Based on previous data, it is expected that influent TPHg concentrations and extraction rates should increase as the groundwater levels fall in the summer and fall, assuming they fall to previously observed levels for that time of the year (i.e. 15 to 20 ft bgs). If groundwater levels fall to those levels but TPHg influent concentrations and extractions do not increase, it may indicate that there is a minimal mass remaining in soil to be recovered.

Blue Rock recommends continued operation of the soil vapor extraction and air-sparge remediation system as designed. Data will continue to be analyzed to evaluate system efficacy and necessity of operation.

Workplan for Additional Soil Assessment

Purpose

This workplan was prepared in response to the HCDEH letter dated March 22, 2006, which requested a workplan for the following items:

- The need to delineate the extent of soil contamination north of boring B-B.
- The need to delineate the vertical extent of MTBE in soil in the areas of SW-13, B-B, B-C, B-H, B-2, MW-7, VEW-1, VEW-2, and VEW-3.

In addition to addressing those issues, Blue Rock proposes to perform confirmation soil sampling in areas of previously documented sorbed-phase contamination to confirm, and evaluate to what extent, clean-up has occurred. These data will also help facilitate a better understanding of the remaining sorbed-phase contaminants mass and concentration.

Proposed Boring Locations and Rationale

The following section summarizes the proposed soil boring locations and rationale. Proposed drilling locations are shown on Figure 9.

Proposed Boring	Rationale
PB-5	Located north of B-B for delineation of soil contamination.
PB-6	Located at SW-13 for vertical MTBE delineation and soil confirmation sampling.
PB-7	Located at B-3 for vertical MTBE delineation and soil confirmation sampling.
PB-8	Located at VEW-1 for vertical MTBE delineation and soil confirmation sampling.
PB-9	Located at B-H for vertical MTBE delineation.
PB-10	Located at VEW-2 for vertical MTBE delineation and soil confirmation sampling.
PB-11	Located at B-B for confirmation soil sampling and vertical TPHg delineation
PB-12	Located between B-C, B-2, and VEW-4 for confirmation soil sampling
PB-13	Located next to MW-7 for confirmation soil sampling
PB-14	Located next to VEW-3 for confirmation soil sampling

Drilling Activities

Blue Rock proposes to drill in up to 10 locations in both on- and off-site areas in an effort to delineate the vertical extent of MTBE in soil and evaluate current soil contaminant concentrations in locations and depths of elevated contaminant concentrations measured prior to the start of remediation (Figure 9).

Prior to drilling, soil boring permits will be obtained from the HCDEH, and encroachment permits or right-of-entry agreements will be obtained from appropriate parties, as needed. Prior to initiation of drilling activities, Blue Rock and drilling subcontractor personnel will review and sign a Site Safety Plan. Prior to drilling, the site will be marked by Underground Service Alert to identify utilities leading to the site.

The soil borings will be advanced using a truck-mounted Geoprobe® 5400 or Geoprobe® Power Probe direct-push drill-rig equipped with two-inch diameter drill-rod. Soil samples will be collected from the soil borings at a minimum of 5 foot depth intervals. Portions of each soil sample will be retained for a visual sedimentologic description by a Blue Rock scientist, working under the supervision of a California Professional Geologist at Blue Rock, using the Unified Soil Classification System, and for volatile organic headspace analysis using either a flame- or photo-ionizing organic vapor meter (OVM). The borings will be advanced to approximately 30 feet bgs or when OVM readings indicate the absence of potential sorbed-phase contamination.

Upon completion of sampling, all boreholes will be backfilled to the surface with cement. Drill-rod, hand-augers, and sampling devices will be cleaned in an Alconox® wash followed by double rinse in clean tap water to prevent cross-contamination. Rinseate will be stored in labeled 55-gallon drums on-site pending removal and disposal.

Soil Sample Collection

It is anticipated that up to 46 soil samples will be retained from each soil boring for laboratory analysis. These samples will be covered with teflon lined plastic end caps, labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory. The tentative soil sample analysis program is summarized below:

Proposed Boring	Depths of Soil Sample Analysis (ft bgs)
PB-5	15, 20, 25, 30
PB-6	15, 20, 25, 30
PB-7	5, 10, 15, 20, 25, 30
PB-8	10, 15, 20, 25, 30
PB-9	20, 25, 30
PB-10	10, 15, 20, 25, 30
PB-11	15, 20, 25, 30
PB-12	10, 15, 20, 25, 30
PB-13	10, 15, 20, 25, 30
PB-14	10, 15, 20, 25, 30

Soil Sample Analysis

A California DHS-certified laboratory will analyze the soil samples for concentrations of TPHg, BTEX and MTBE using EPA Methods 8260B.

Proposed Schedule

Blue Rock desires to complete the proposed scope of work as early as the end of April 2006. The report summarizing the investigation will follow 45 days after field activities.

Proposed Reporting

Blue Rock will prepare a report summarizing the investigation. The report will be supported by data presented in tabular and graphical form. The report will provide recommendations for future activities, as appropriate, and it will be prepared under the supervision of, and sealed by, a California Professional Geologist at Blue Rock.

Evaluation of MTBE Concentrations in Groundwater between 15 to 25 ft bgs

In their letter dated March 22, 2006, the HCDEH indicated that well screen intervals from 15-25 ft bgs, rather than the existing 5-25 ft bgs, would more accurately encompass the depth interval where MTBE has been detected in soil. The HCDEH suggested that the change in screened interval would affect MTBE concentrations in water.

Blue Rock concurs that when depth to water in the wells (screened 5-25 ft bgs) is shallower than 15 ft bgs, there is a potential for mixing of water originating from the depth interval of 15-25 ft bgs, where MTBE has been detected in soil.

Blue Rock reviewed existing site information to determine if any existing data were suited for evaluation of MTBE concentrations in water from the zone of 15-25 ft bgs. Blue Rock found that these criteria appear to be met when groundwater levels fall below 15 ft bgs in all of the wells. When water levels drop below 15 ft bgs in the wells, which are only screened to 25 ft bgs, the saturated column effectively measures a screened interval from 15-25 ft bgs.

In order to evaluate MTBE concentrations in water from between 15-25 ft bgs, Blue Rock segregated historical monitoring data for depth to water >15 ft bgs and MTBE concentrations in all wells, and plotted MTBE concentrations vs. time for these conditions (Appendix D). These data, like cumulative data, show historical declining trends of MTBE in groundwater between 15-25 ft bgs, even before remediation.

September 2005 was the most recent monitoring event when depth to water was >15 ft bgs. During that monitoring event, MTBE concentrations ranged from <0.5 µg/L (nine wells) to 6.5 µg/L (MW-5). Using these data, the most recent MTBE concentrations in the water from the depth between 15-25 ft bgs are all below the Clean-up Goal of 5 µg/L, except MW-5 which only contained MTBE at 6.5 µg/L.

While the shallow groundwater conditions of winter and spring are typically not suitable for this analysis, it is likely that the lower groundwater conditions in the summer and fall may fulfill the criteria described above to address MTBE concentrations in groundwater from between 15-25 ft bgs.

Project Status and Recommendations

- The SVE / AS system should continue operation as designed. The next influent / effluent sampling event is scheduled for April 2006.
- The site is currently being monitored on a quarterly basis per the HCDEH directive directives. The next quarterly sampling event is scheduled for June 2006.
- Blue Rock proposes the reduction in frequency of sampling several wells due to the fact they have been non-detect for an extended period of time. The following table summarizes the proposed monitoring schedule:

Well.	First Quarter	Second Quarter	Third Quarter*	Fourth Quarter	Notes
MW-1	DTW	DTW	DTW	TPHg, BTEX, MTBE & DTW	Clean well
MW-2	DTW	DTW	DTW	TPHg, BTEX, MTBE & DTW	Clean well
MW-3	DTW	DTW	DTW	TPHg, BTEX, MTBE & DTW	Clean well
MW-4	DTW	DTW	DTW	TPHg, BTEX, MTBE & DTW	Clean well
MW-5	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	Core plume well
MW-6	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	Marginal plume well
MW-7	TPHd, TPHg, BTEX, MTBE & DTW	TPHd, TPHg, BTEX, MTBE & DTW	TPHd, TPHg, BTEX, MTBE & DTW	TPHd, TPHg, BTEX, MTBE & DTW	Core plume well
MW-8	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	Marginal plume well
MW-9	DTW	DTW	DTW	TPHg, BTEX, MTBE & DTW	Clean well
MW-10	DTW	DTW	DTW	TPHg, BTEX, MTBE & DTW	Clean well
MW-11	DTW	DTW	DTW	TPHg, BTEX, MTBE & DTW	Clean well
MW-12	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	TPHg, BTEX, MTBE & DTW	Marginal plume well

Notes:

The Fourth Quarter is selected as the annual monitoring event because that is when groundwater levels are lowest (the seasonal low for the last 5 of 6 years), and saturated columns are often within 15-25 ft bgs where MTBE in soil has been detected.

TPHg by EPA Method 8015M or 8260B

BTEX by EPA Method 8021B or 8260B

MTBE by EPA Method 8260B

DTW = Depth to water

Certification

This report was prepared under the supervision of a California Professional Geologist at Blue Rock. All statements, conclusions, and recommendations are based upon published results from past consultants, field observations by Blue Rock, and analyses performed by a state-certified laboratory as they relate to the time, location, and depth of points sampled by Blue Rock. Interpretation of data, including spatial distribution and temporal trends, are based on commonly used geologic and scientific principles. It is possible that interpretations, conclusions, and recommendations presented in this report may change, as additional data become available and/or regulations change.

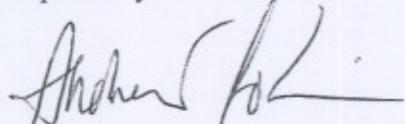
Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

The service performed by Blue Rock has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

If you have any questions regarding this project, please contact us at (707) 441-1934.

Sincerely,
Blue Rock Environmental, Inc.

Prepared by:

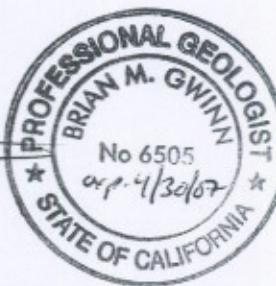


Andrew LoCicero
Project Scientist

Reviewed by:



Brian Gwinn, P.G.
Principal Geologist



Attachments:

- Table 1: Well Construction Details
- Table 2: Groundwater Elevations and Sample Analytical Results
- Table 3: SVE Air Sample Analytical Results
- Table 4: SVE Operational Data
- Table 5: SVE Catox Treatment Data
- Table 6: SVE Catox Emissions Calculations
- Table 7: Cumulative Soil Analytical Data

- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 2a: Cross Section A-A'-A''
- Figure 2b: Cross Section B-B'
- Figure 3: Groundwater Elevation and Gradient Map – March 6, 2006
- Figure 4: Cumulative Groundwater Flow Direction and Gradient 6/99 – 3/06
- Figure 5: Dissolved-Phase Hydrocarbon (TPHg) Distribution – March 6, 2006
- Figure 6a: SVE Layout and Radius of Influence (VEW-1, 3, 5)
- Figure 6b: SVE Layout and Radius of Influence (VEW-2, 4, 6)
- Figure 7: Catox and Well Manifold Schematic
- Figure 8: Air-Sparge Blower and Well Manifold Schematic
- Figure 9: Proposed Soil Borings

- Chart 1 – Influent TPHg Concentrations & Total TPHg Recovery vs. Time
- Chart 2 – Average TPHg Recovery Rates vs. Time

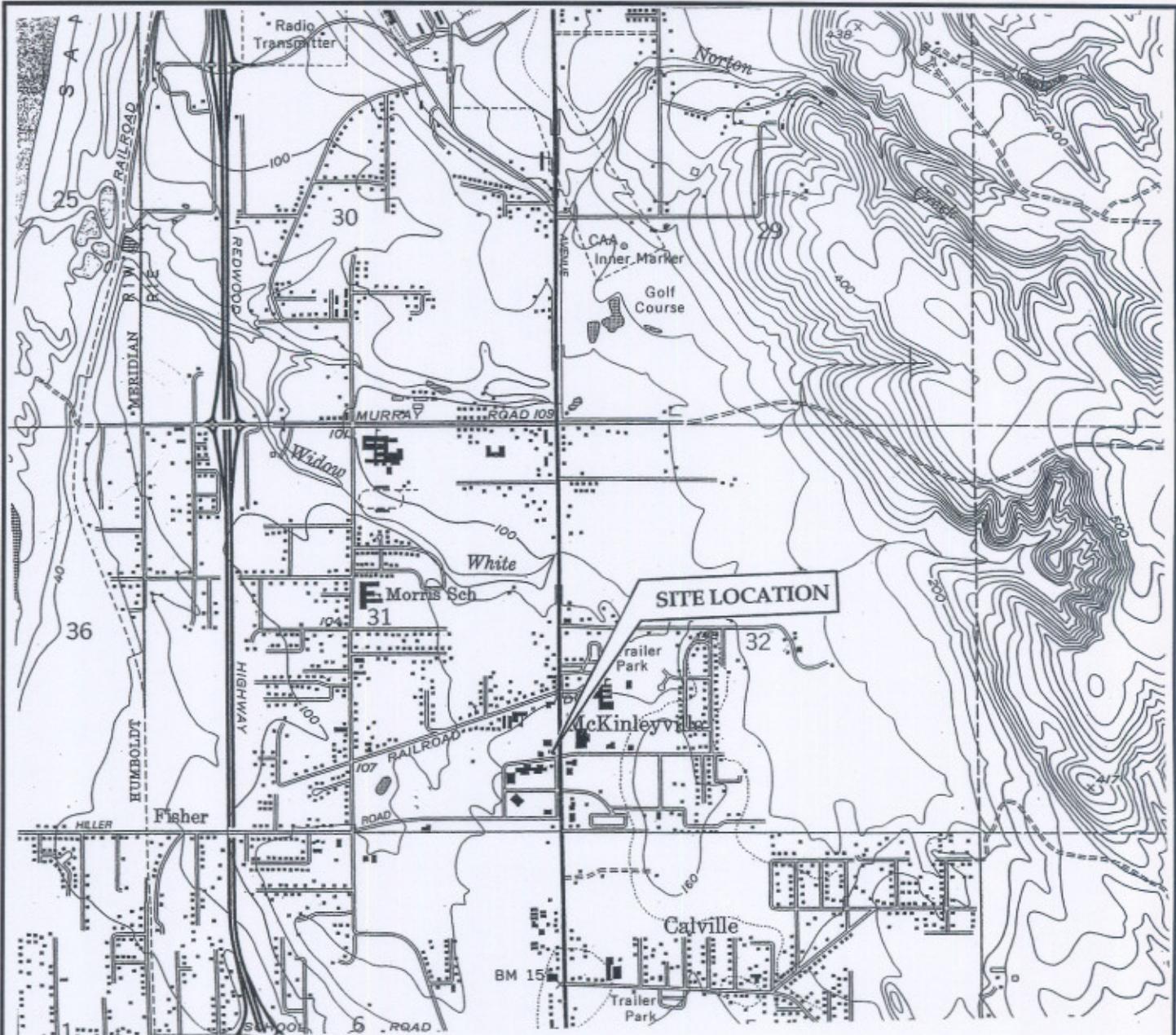
- Appendix A: Blue Rock Gauge/Purge Calculations Well Purging Data field sheets and SVE O&M Forms
- Appendix B: Laboratory Analytical Reports and Chain-of-Custody Forms
- Appendix C: North Coast Unified Air Quality Management District Authority to Construct Permit
- Appendix D: MTBE Concentration Data in Water Between 15-25 ft bgs

Distribution:

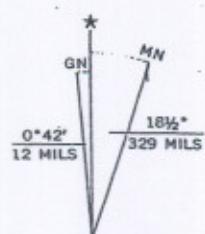
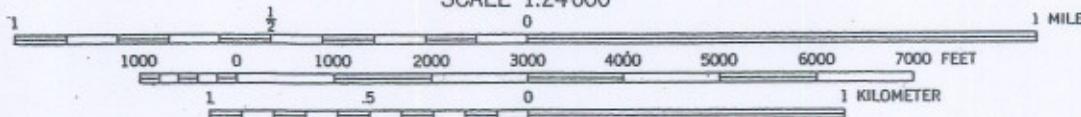
- Mr. Greg Pierson, Louise Pierson Revocable Trust, 1200 W. Harris Street, Eureka, CA 95503

- Mr. Al Steer, North Coast Unified Air Quality Management District, 2300 Myrtle Ave. Eureka, CA 95501

FIGURES



SCALE 1:24000



CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 4 FEET

UTM GRID AND 1972 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

Site Location Map

Former Central BP Station
2160 Central Avenue
McKinleyville, California

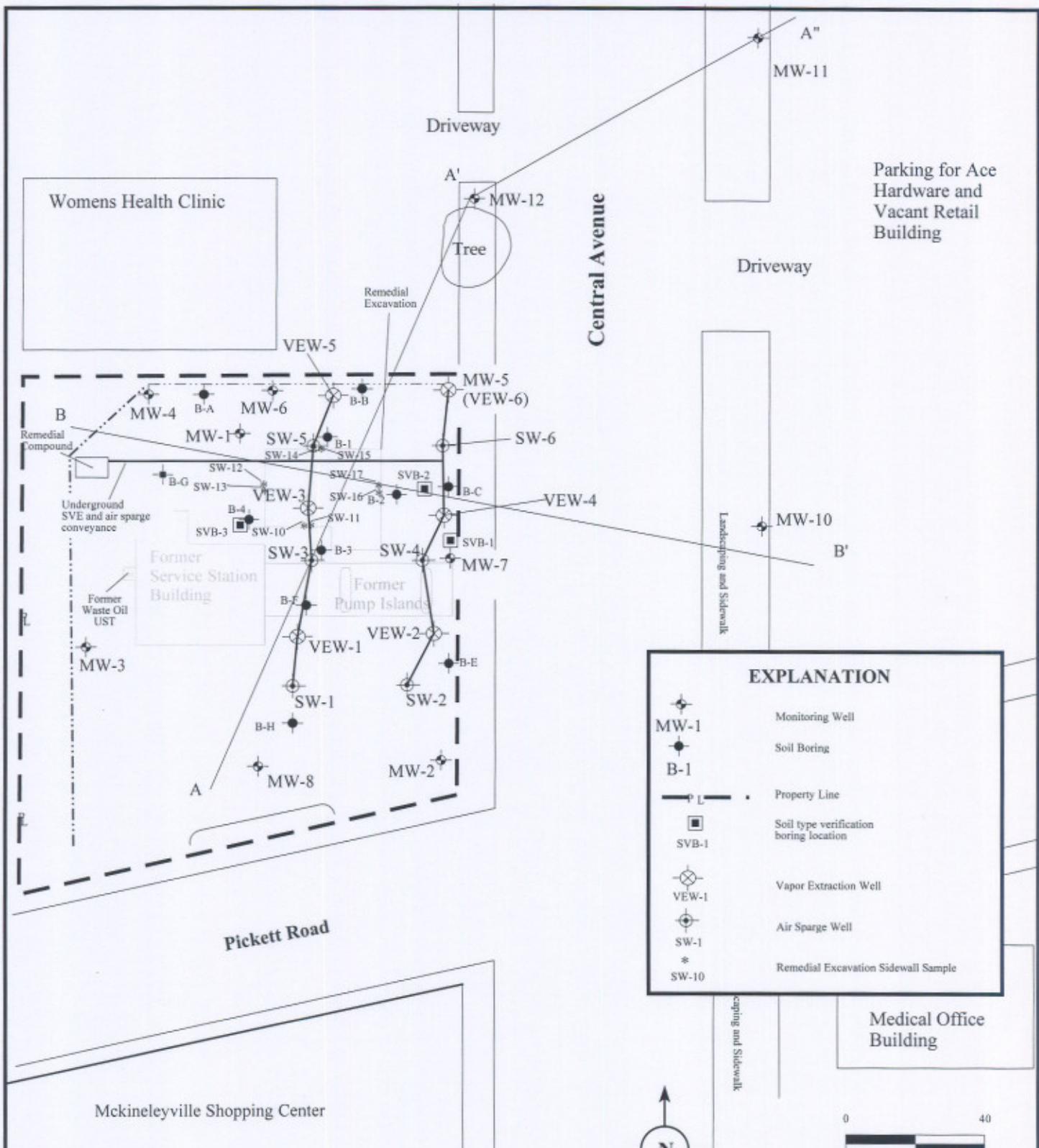


BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-24

Date
4/06

Figure
1

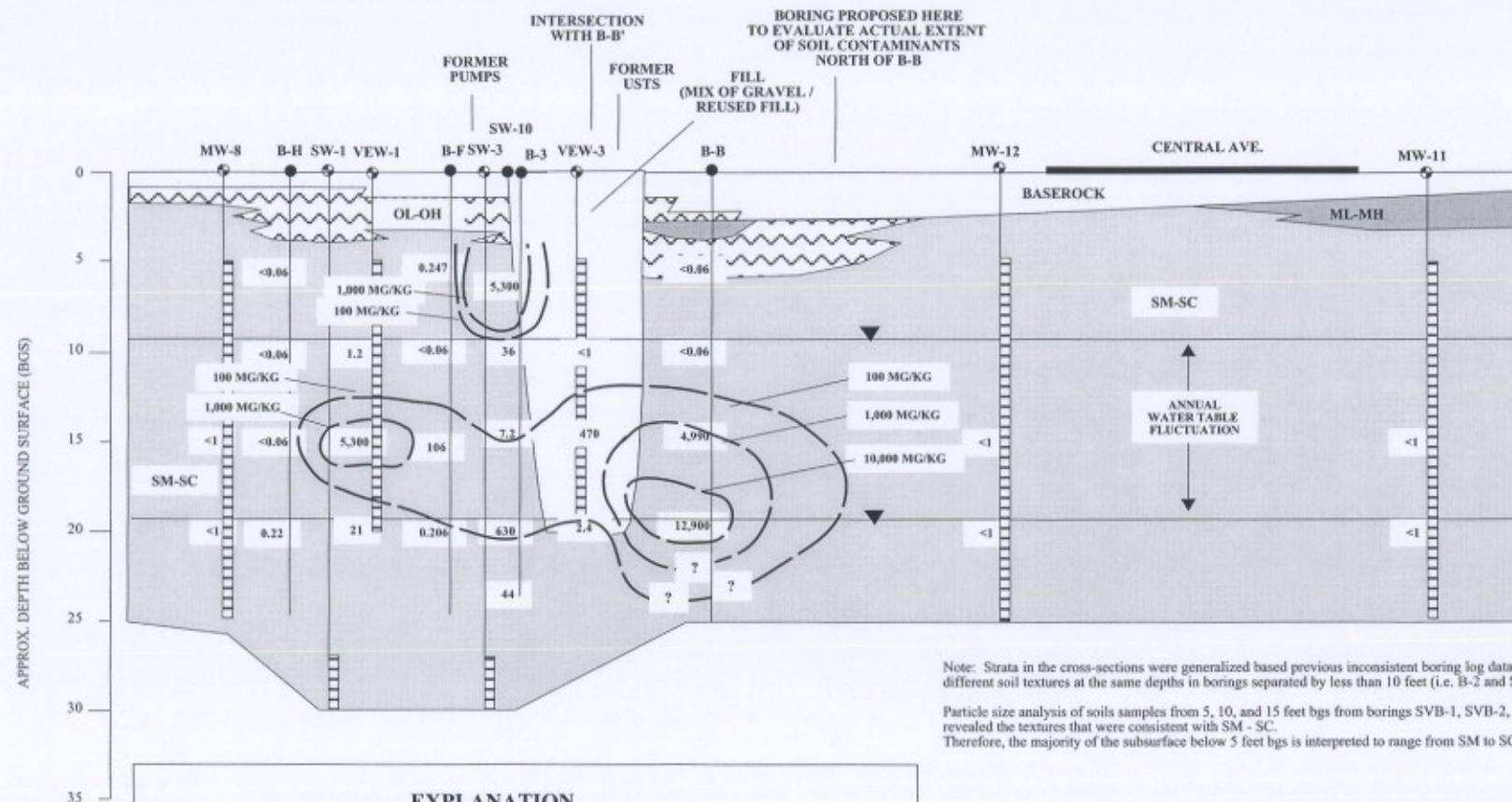


Site Plan
Former Central BP Station
2160 Central Avenue
McKinleyville, California

Project No. NC-24	Report Date 4/06	Figure 2
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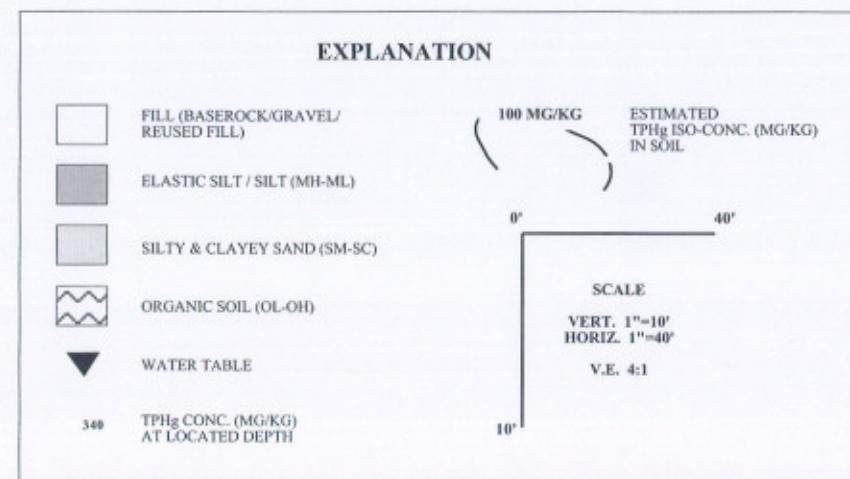
BLUE ROCK ENVIRONMENTAL, INC.

A
SOUTH-SOUTHWEST ← → A'
INTERSECTION WITH B-B' → NORTH-NORTHEAST / SOUTHEAST ← → A''
NORTHEAST



Note: Strata in the cross-sections were generalized based previous inconsistent boring log data indicating significantly different soil textures at the same depths in borings separated by less than 10 feet (i.e. B-2 and SVB-2).

Particle size analysis of soils samples from 5, 10, and 15 feet bgs from borings SVB-1, SVB-2, and SVB-3 revealed the textures that were consistent with SM - SC. Therefore, the majority of the subsurface below 5 feet bgs is interpreted to range from SM to SC.

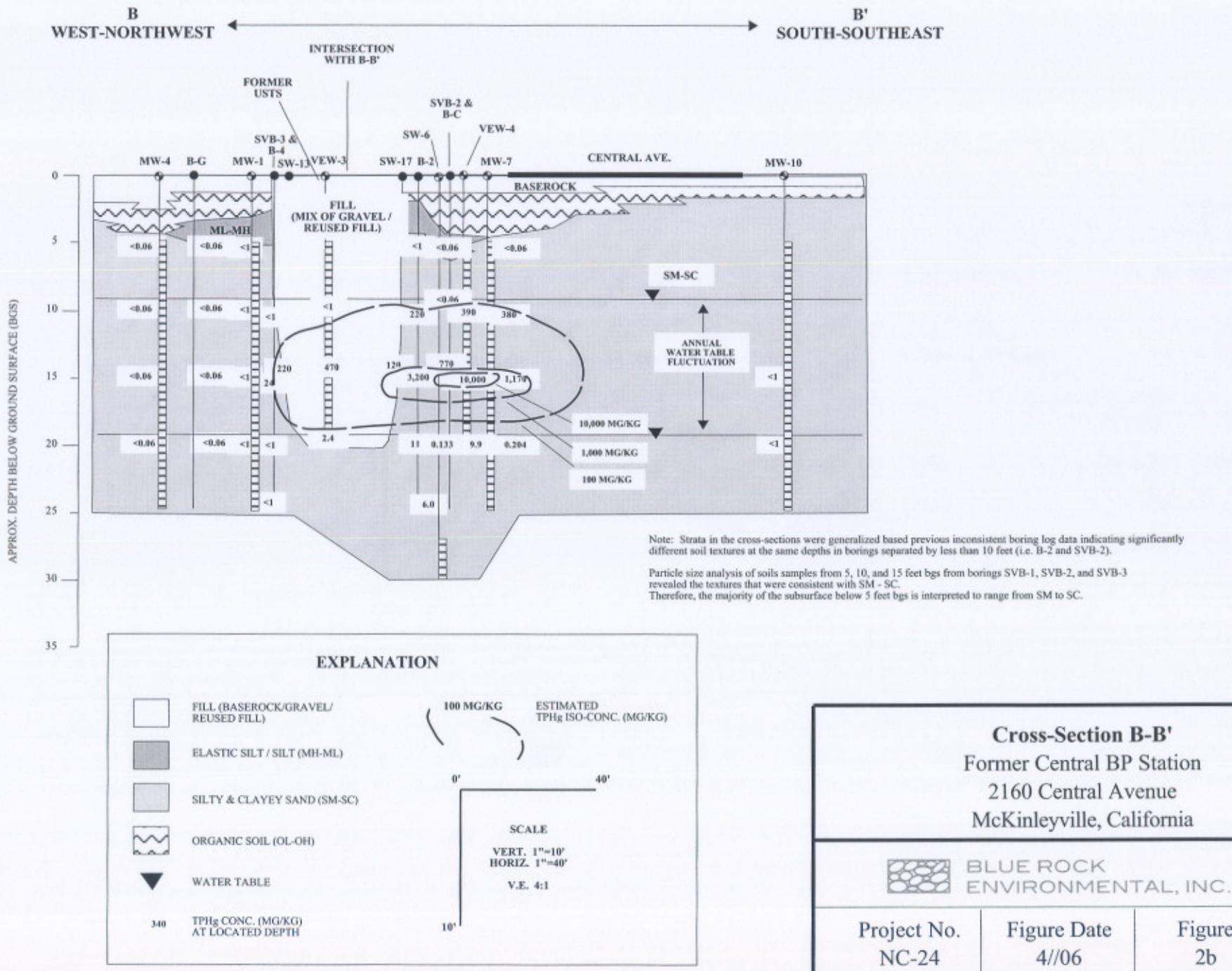


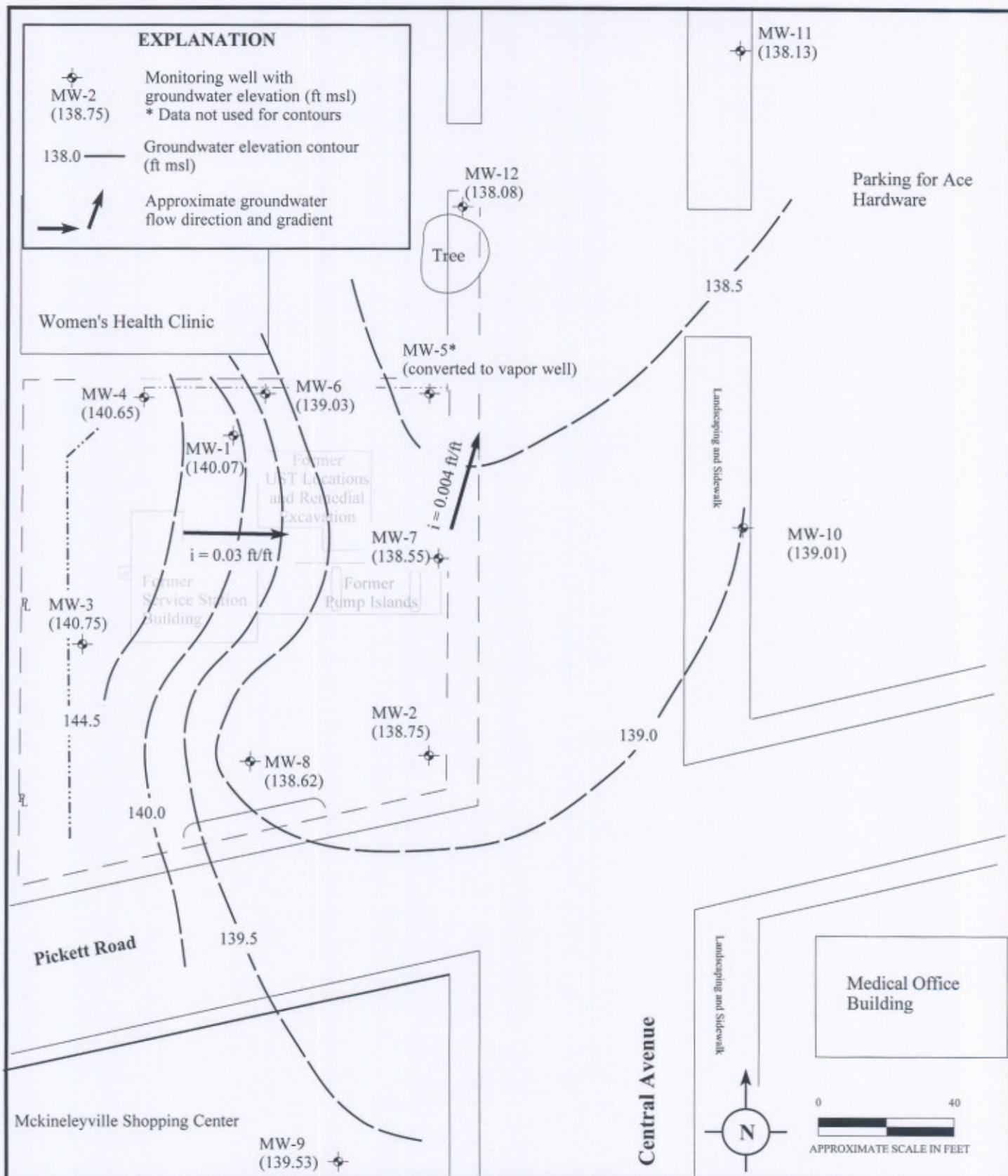
Cross-Section A-A'-A''
Former Central BP Station
2160 Central Avenue
McKinleyville, California

Project No. NC-24	Figure Date 4/06	Figure 2a
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BLUE ROCK
ENVIRONMENTAL, INC.





Groundwater Elevation and Gradient -3/6/06

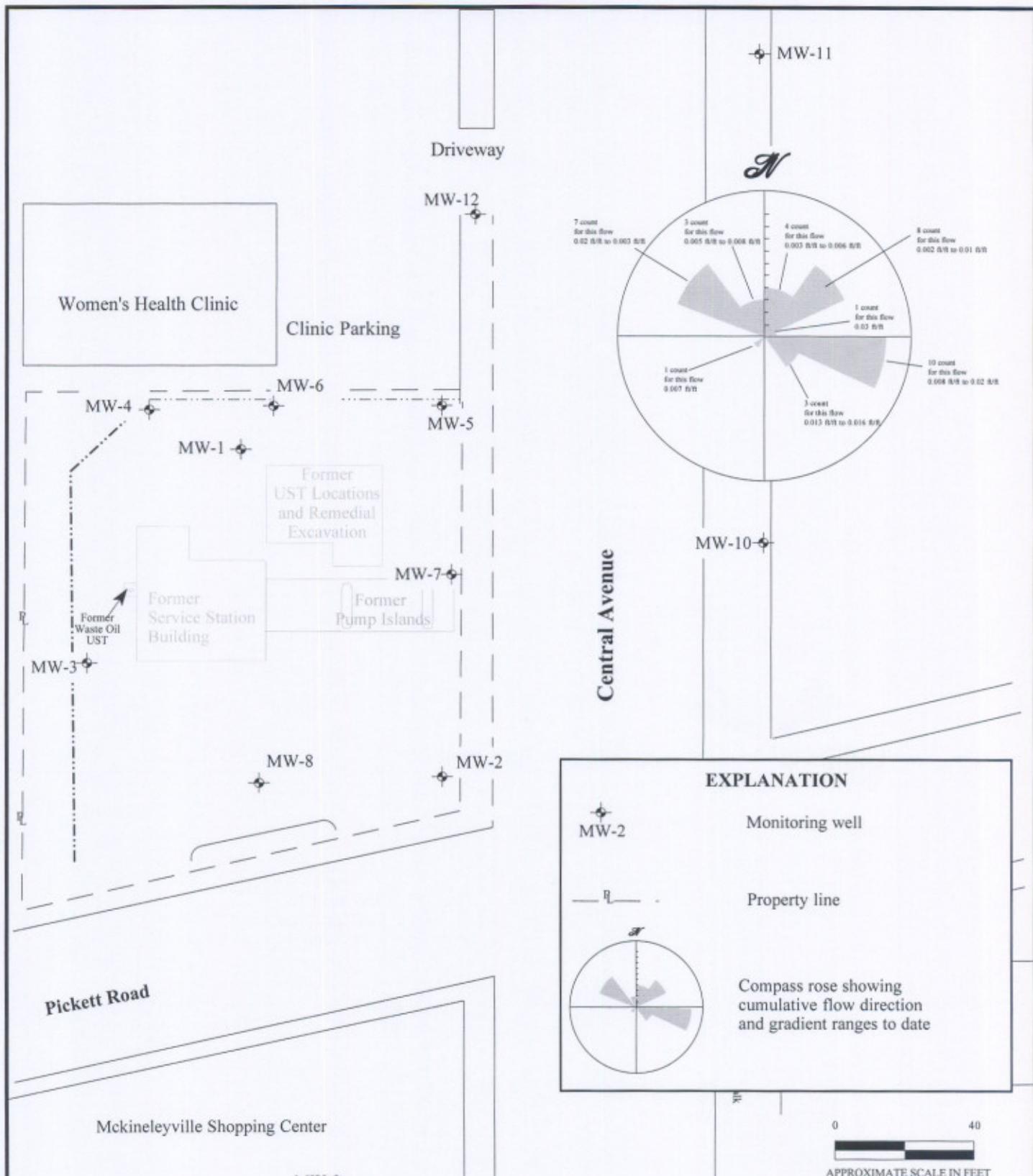
Former Central BP Station
2160 Central Avenue
McKinleyville, California

 **BLUE ROCK ENVIRONMENTAL, INC.**

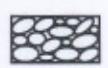
Project No.
NC-24

Report Date
4/06

Figure
3



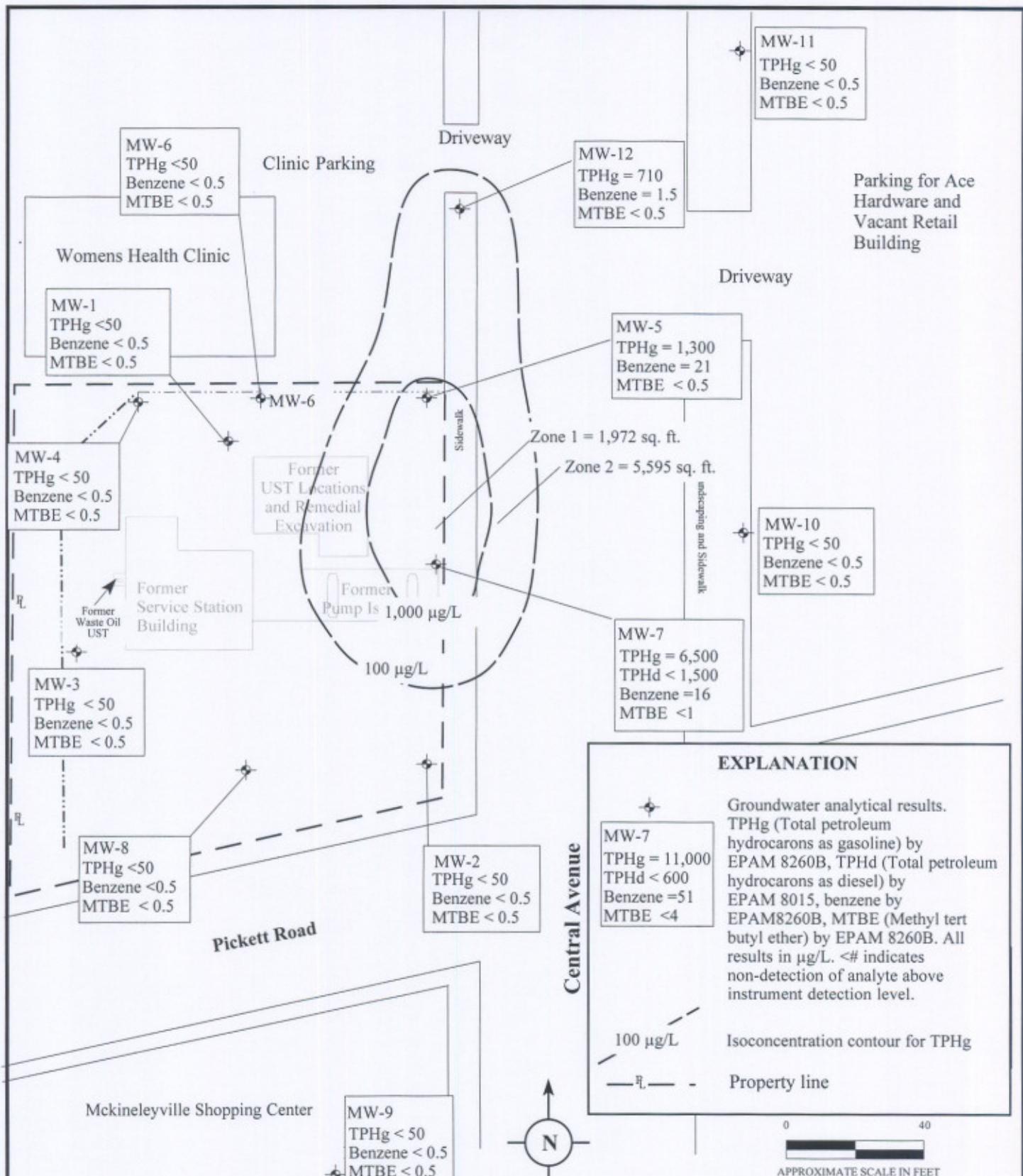
Cumulative Flow Direction and Gradient 6/99 to 3/06
 Former Central BP Station
 2160 Central Avenue
 McKinleyville, California

 **BLUE ROCK
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Project No.
NC-24

Report Date
4/06

Figure
4



Dissolved-Phase Hydrocarbon (TPHg) Distribution 3/6/06

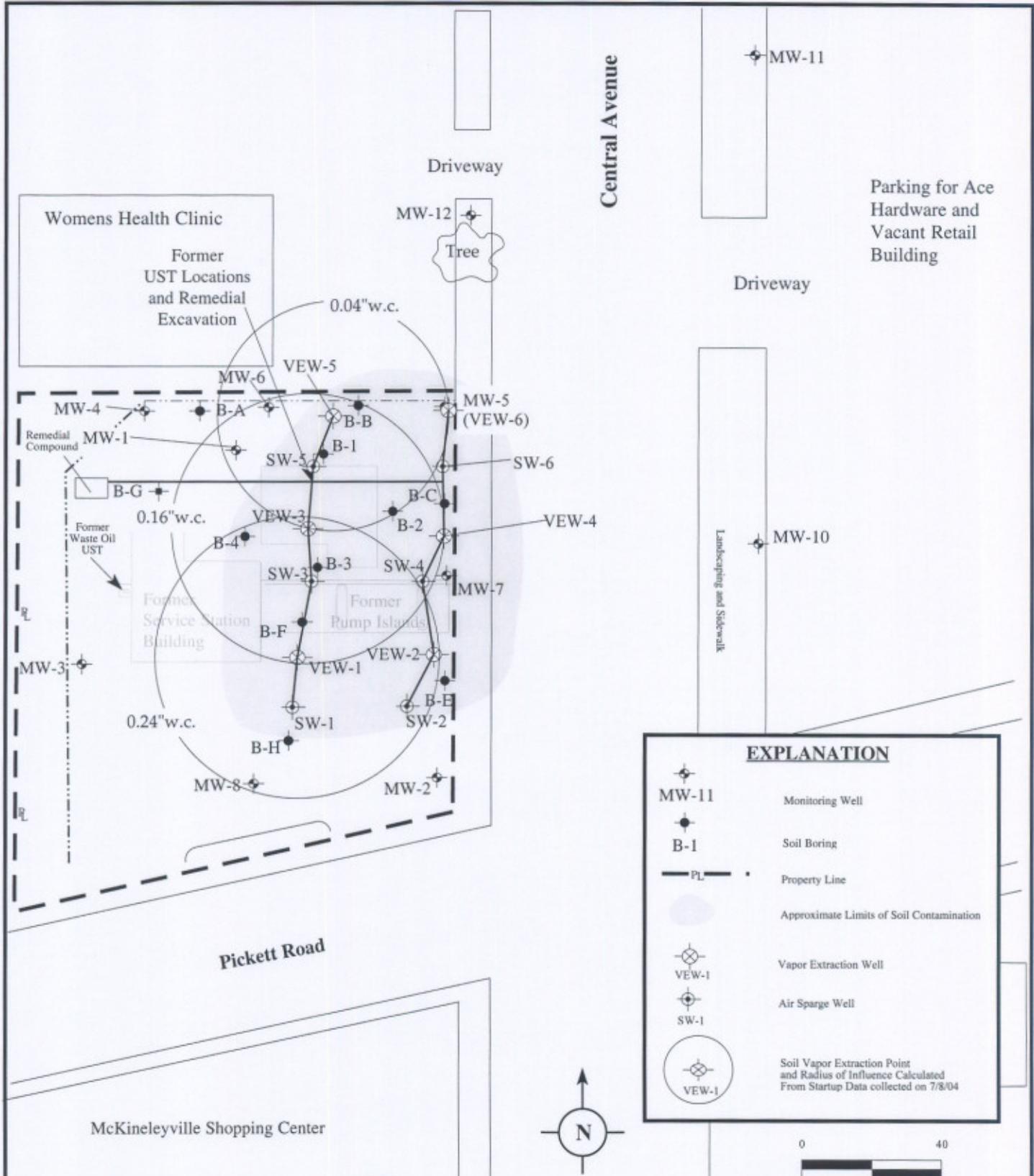
Former Central BP Station
2160 Central Avenue
McKinleyville, California

BLUE ROCK ENVIRONMENTAL, INC.

Project No.
NC-24

Report Date
3/06

Figure
5



SVE Layout and Radius of Influence (VEW1, 3, 5)

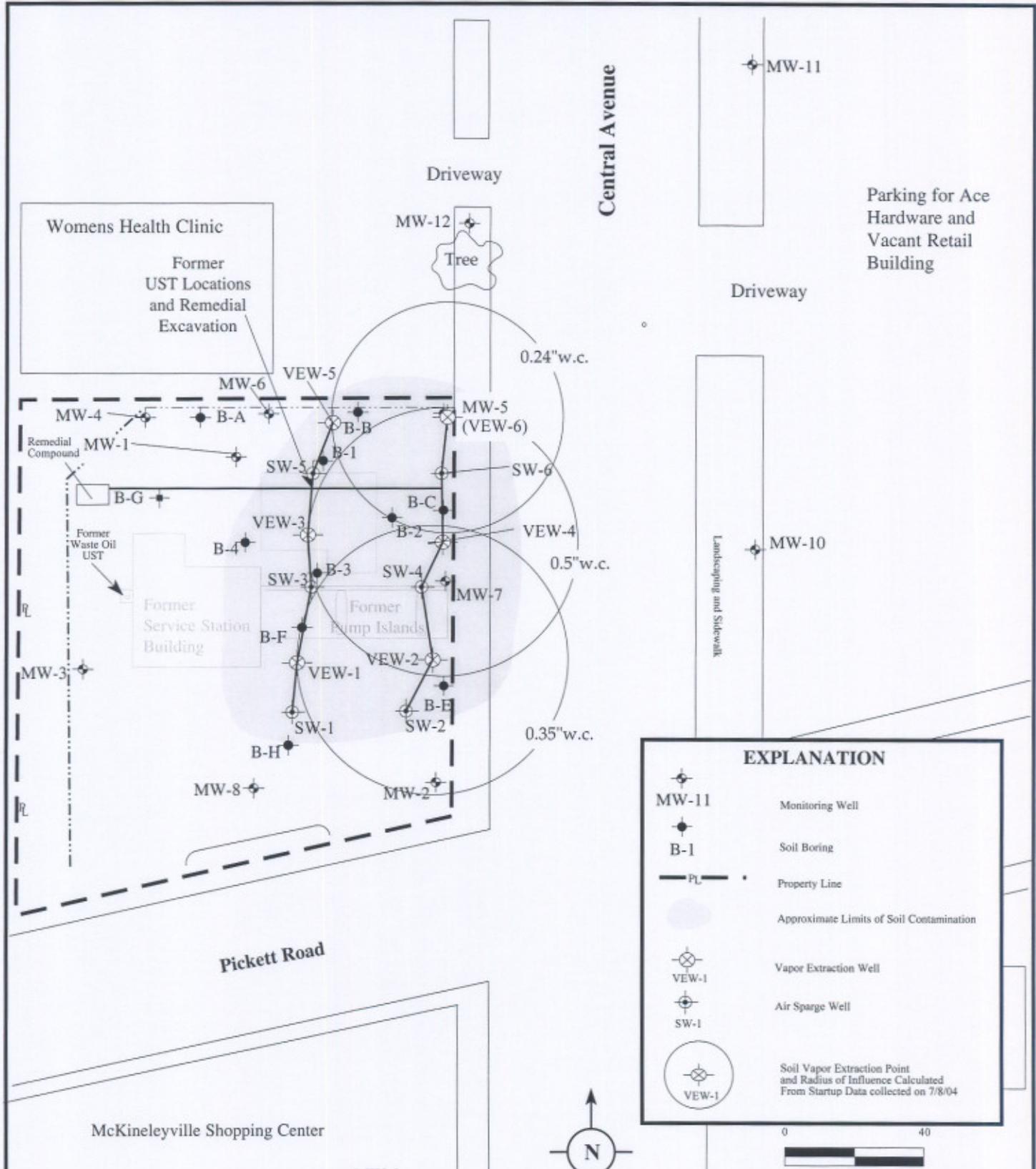
Former Central BP Station
2160 Central Avenue
McKinleyville, California

 **BLUE ROCK
ENVIRONMENTAL, INC.**

Project No.
NC-24

Report Date
4/06

Figure
6a



SVE Layout and Radius of Influence (VEW2,4,6)

Former Central BP Station
2160 Central Avenue
McKinleyville, California

BLUE ROCK ENVIRONMENTAL, INC.

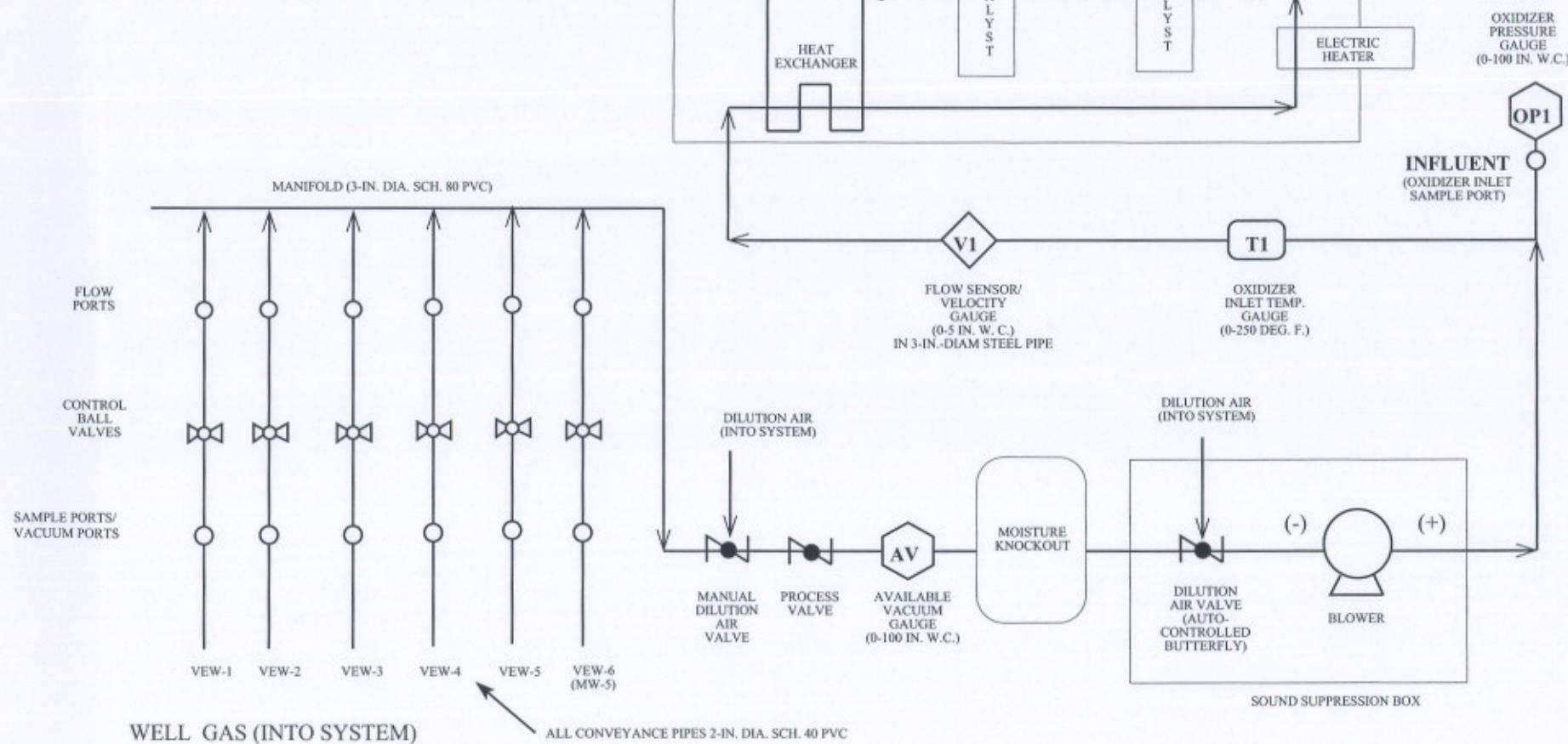
Project No.
NC-24

Report Date
4/06

Figure
6b

CATALYTIC-OXIDIZER EXHAUST
(OUT OF SYSTEM)

DRAWING
NOT TO SCALE



Catox and Well Manifold Schematic

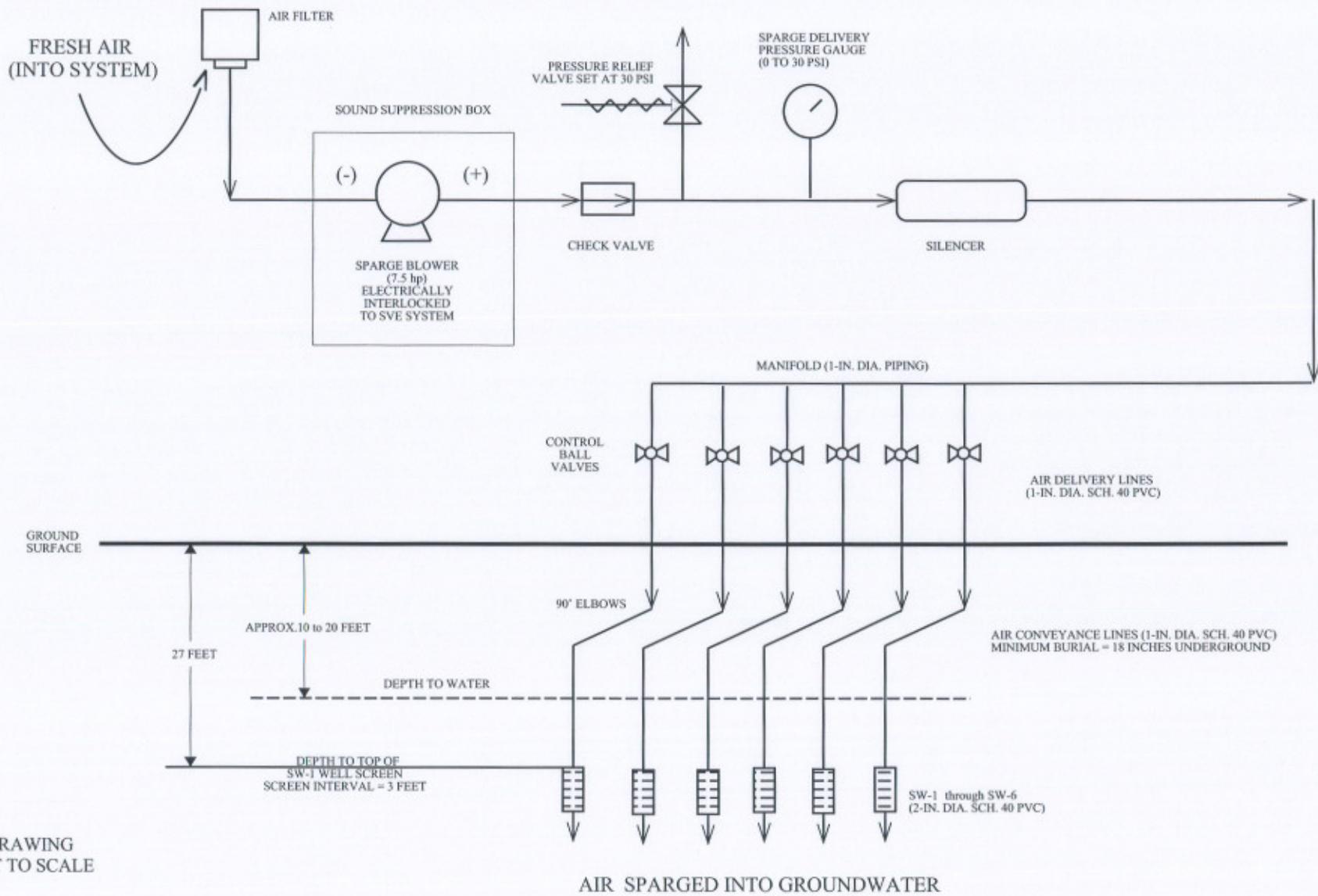
Former Central Bp Station
2616 Central Avenue
McKinleyville, California

 **BLUE ROCK
ENVIRONMENTAL, INC.**

Project No.
NC-24

Report Date
4/06

Figure
7



Air-Sparge Blower And Well Manifold Schematic

Former Central Bp Station
2616 Central Avenue
McKinleyville, California

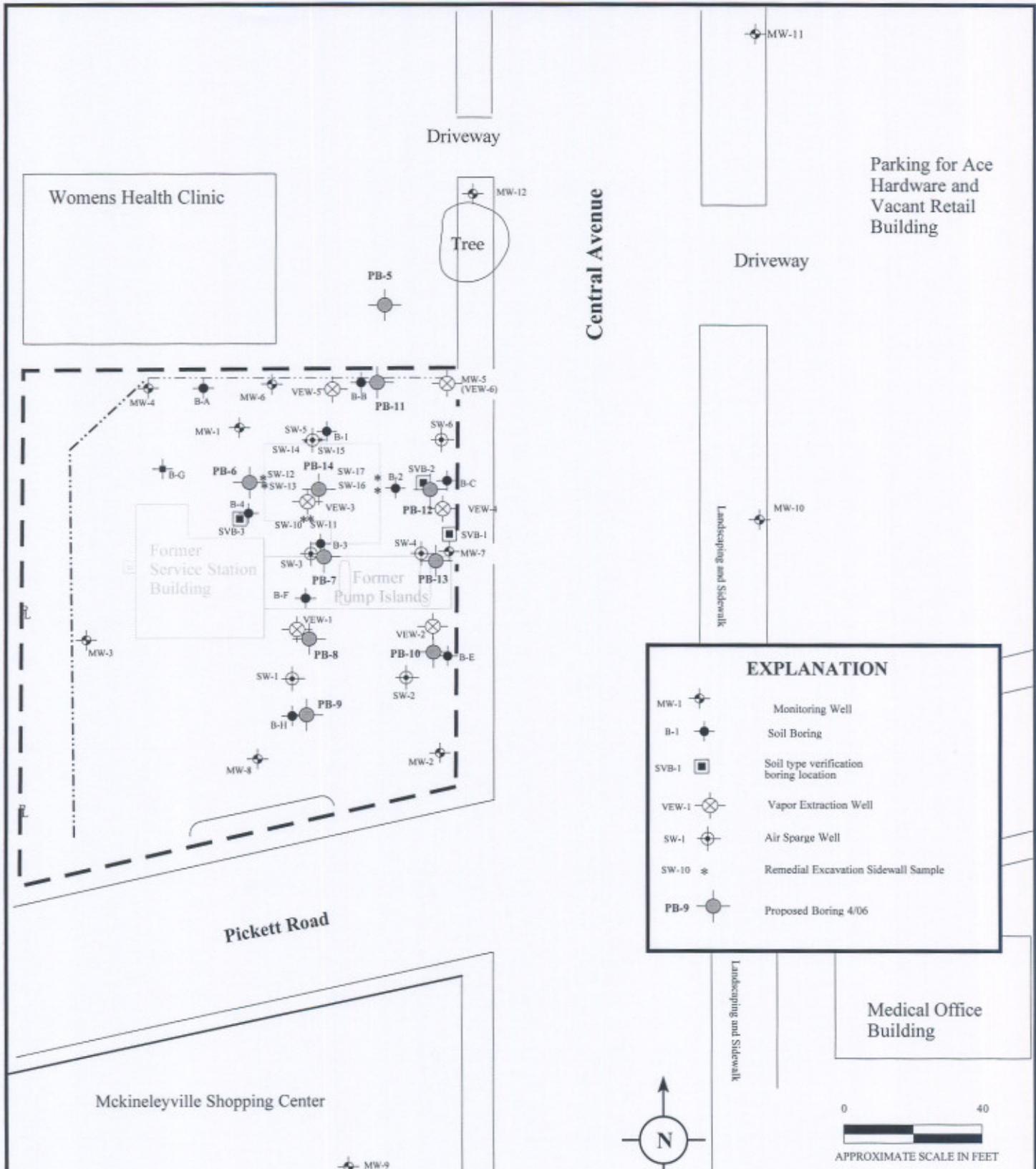


BLUE ROCK
ENVIRONMENTAL, INC.

Project No.
NC-24

Report Date
4/06

Figure
8



Proposed Boring Locations
Former Central BP Station
2160 Central Avenue
McKinleyville, California

 **BLUE ROCK ENVIRONMENTAL, INC.**
Project No. NC-24 | Report Date 4/06 | Figure 9

Chart 1 - Influent TPHg Concentrations & Total TPHg Recovery vs. Time
Former Central BP Station
2160 Central Ave, McKinleyville, CA

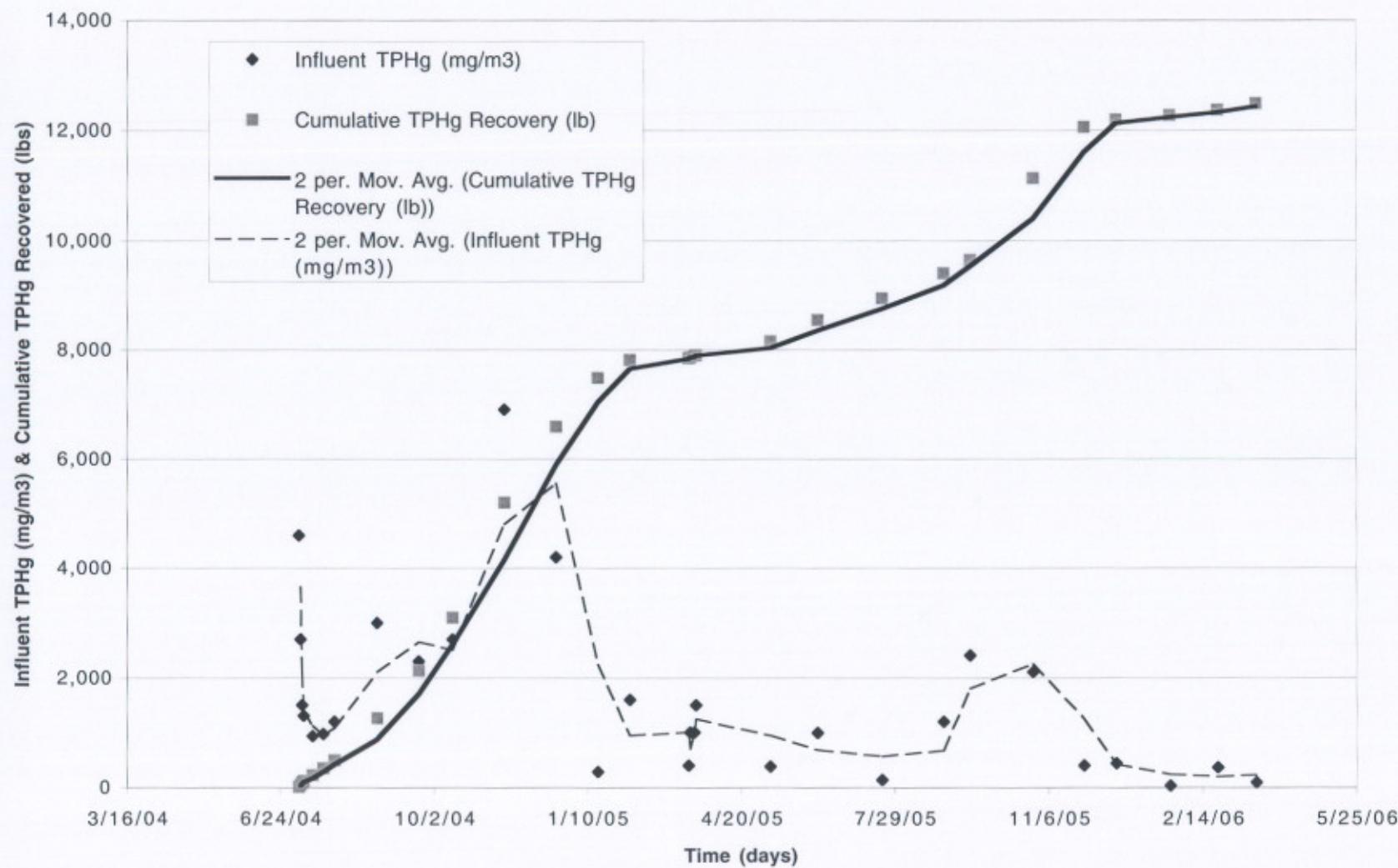
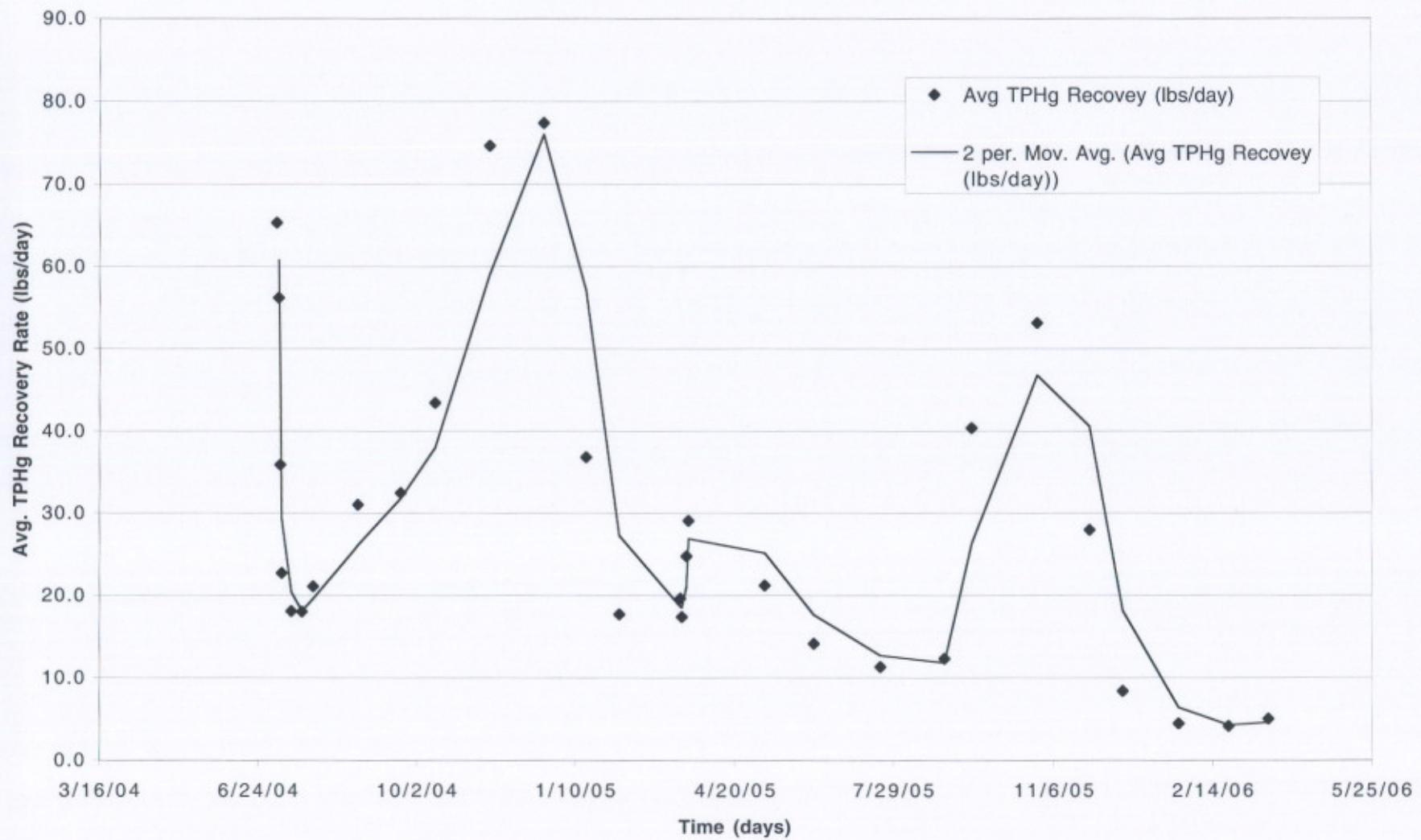


Chart 2 - Avg TPHg Recovery Rate vs. Time
Former Central BP Station
2160 Central Ave, McKinleyville, CA



TABLES

Table 1
Well Construction Data
Former Central BP Station
2160 Central Ave
McKinleyville, California
Blue Rock Project No. NC-24

Well Identification	Date Installed	Installed by	Casing Diameter (inches)	Total Depth (feet)	Blank Interval (feet)	Screened Interval (feet)	Slot Size (inches)	Filter Pack (feet)	Bentonite Seal (feet)	Cement (feet)
MW-1	7/20/99	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-2	7/20/99	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-3	7/20/99	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-4	8/30/00	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-5	8/30/00	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-6	8/30/00	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-7	8/30/00	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-8	8/6/01	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-9	8/6/01	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-10	8/6/01	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-11	8/6/01	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
MW-12	8/6/01	Clearwater	2	25	0-5	5-25	0.02	4-25	3-4	0-3
VEW-1	9/24/03	Clearwater	2	20	0-5	5-20	0.02	4-20	3-4	0-3
VEW-2	9/24/03	Clearwater	2	20	0-5	5-20	0.02	4-20	3-4	0-3
VEW-3	9/24/03	Clearwater	2	20	0-5	5-20	0.02	4-20	3-4	0-3
VEW-4	9/24/03	Clearwater	2	20	0-5	5-20	0.02	4-20	3-4	0-3
VEW-5	9/24/03	Clearwater	2	20	0-5	5-20	0.02	4-20	3-4	0-3
SW-1	9/25/03	Clearwater	2	30	0-28	28-30	0.02	27-30	25.5 - 27	0-25.5
SW-2	9/25/03	Clearwater	2	30	0-28	28-30	0.02	27-30	25.5 - 27	0-25.5
SW-3	9/25/03	Clearwater	2	30	0-28	28-30	0.02	27-30	25.5 - 27	0-25.5
SW-4	9/25/03	Clearwater	2	30	0-28	28-30	0.02	27-30	25.5 - 27	0-25.5
SW-5	9/25/03	Clearwater	2	30	0-28	28-30	0.02	27-30	25.5 - 27	0-25.5
SW-6	9/25/03	Clearwater	2	30	0-28	28-30	0.02	27-30	25.5 - 27	0-25.5

Table 2
GROUNDWATER ELEVATION AND
ANALYTICAL RESULTS
Former Central BP Station
2160 Central Ave.
McKinleyville, California
Project No. NC-24

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	Ethyl-benzene Xylenes MTBE DIPE TAME ETBE TBA Ethanol Methanol												
					TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)								
MW-1	7/28/99	149.69	14.52	135.17	13,000	620	<500	12	10	580	796	25	--	--	--	--	--
	10/25/99	149.69	17.42	132.27	10,000	640	<500	48	3.9	400	262	83	<2.5	110	<2.5	<50	--
	1/18/00	149.69	14.32	135.37	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<10	--
	2/17/00	149.69	9.36	140.33	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/3/00	149.69	8.52	141.17	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/21/00	149.69	10.39	139.30	<50	<50	<170	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<10	--
	9/12/00	149.69	17.11	132.58	113	135	-	0.7	0.8	3.6	8.1	<2	<0.5	<0.5	<0.5	<500	--
	10/16/00	149.69	17.97	131.72	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/16/00	149.69	18.37	131.72	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/14/00	149.69	18.59	131.10	148	<50	--	2.9	<0.8	<0.8	<1.5	5.1	<1.3	<1.3	<1.3	<1.3	--
	1/22/01	149.69	18.46	131.23	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/16/01	149.69	17.78	131.91	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/9/01	149.69	16.78	132.91	885	100	-	<0.3	<0.5	<0.3	6.2	<2	<0.5	<0.5	<0.5	<0.5	--
	4/13/01	149.69	17.11	132.58	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/01	149.69	17.70	131.99	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/01	149.69	18.04	131.65	930	<250	--	1.7	0.85	20	1.9	0.67	<0.5	<0.5	<0.5	<5	--
	7/18/01	149.69	19.02	130.67	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/01	149.69	19.57	130.12	170	<100	-	<0.5	0.66	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	<50
	10/10/01	149.69	dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/01	149.69	dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/27/01	149.69	15.81	133.88	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	149.69	13.31	136.38	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	149.69	12.46	137.23	64	<50	--	<0.5	<0.5	<0.5	3.1	<0.5	<0.5	<0.5	<0.5	<5	<50
	3/14/02	149.69	9.79	139.90	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	149.69	10.27	139.42	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	149.69	12.12	137.57	<50	<50	--	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<5	<50
	7/23/02	148.28	16.61	131.67	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	148.28	17.01	131.27	430	<200	--	<0.5	<0.5	16	15	<0.5	<0.5	<0.5	<5	58	58
	11/18/02	148.28	dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/6/03	148.28	9.53	138.75	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	5/1/03	148.28	7.83	140.45	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	8/1/03	148.28	14.89	133.39	1,200	<200	--	0.63	5.4	1.8	61	<0.5	<0.5	<0.5	<0.5	<5	--
	11/10/03	148.28	19.25	129.03	<50	64	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	2/4/04	148.28	10.01	138.27	<50	71	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--
	6/28/04	148.28	15.04	133.24	630	<200	--	<0.5	1.2	15	22	<0.5	--	--	--	--	--
	9/8/04	148.28	17.87	130.41	150	<200	--	<0.5	<0.5	5.9	<0.5	<0.5	--	--	--	--	--
	12/2/04	148.28	19.19	129.09	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--
	3/27/05	148.28	14.04	134.24	130	<50	--	<0.5	<0.5	1.3	1.9	<0.5	--	--	--	--	--
	6/14/05	148.28	13.42	134.86	<50	59	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	9/13/05	148.28	18.28	130.00	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	12/28/05	148.28	9.59	138.69	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	3/6/06	148.28	8.21	140.07	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
MW-2	7/28/99	149.24	14.11	135.13	<50	<50	<500	<0.5	<50	<0.5	<0.5	40	--	--	--	--	--
	10/25/99	149.24	16.77	132.47	<50	<50	<500	1.4	<0.5	<0.5	<0.5	27	<1	<1	<1	<10	--
	1/18/00	149.24	9.89	139.35	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	1.0	<1	<1	<1	<10	--
	2/17/00	149.24	10.76	138.48	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/3/00	149.24	9.72	139.52	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/21/00	149.24	11.21	138.03	<50	<50	<170	<0.5	<0.5	<0.5	<0.5	<0.5	12	<1	<1	<1	<10
	9/12/00	149.24	16.43	132.81	<50	<50	--	0.9	<0.3	<0.3	<0.6	23.9	<0.5	<0.5	<0.5	<500	--
	10/16/00	149.24	17.33	131.91	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/16/00	149.24	17.86	132.81	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/14/00	149.24	18.16	131.91	<50	<50	--	<0.3	<0.3	<0.3	<0.6	14.3	<0.5	<0.5	<0.5	<0.5	--
	1/22/01	149.24	18.19	131.05	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/16/01	149.24	17.74	131.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/9/01	149.24	17.04	132.20	<50	<50	--	<0.3	<0.3	<0.3	<0.6	7.0	<0.5	<0.5	<0.5	<0.5	--
	4/13/01	149.24	17.01	132.23	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
GROUNDWATER ELEVATION AND
ANALYTICAL RESULTS
Former Central BP Station
2160 Central Ave.
McKinleyville, California
Project No. NC-24

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	Ethyl-benzene													
					TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	ETBE (µg/L)	TBA (µg/L)	Ethanol (µg/L)	Methanol (µg/L)
MW-2	5/7/01	149.24	17.34	131.90	--	--	--	--	--	--	--	--	--	--	--	--	--	
	6/1/01	149.24	17.83	131.41	<50	<50	-	<0.5	<0.5	<0.5	<0.5	13	<0.5	<0.5	<0.5	<5	--	--
Screen	7/18/01	149.24	18.65	130.59	--	--	--	--	--	--	--	--	--	--	--	--	--	
5'-25'	8/17/01	149.24	19.14	130.10	<50	<50	--	<0.5	<0.5	<0.5	<0.5	13	<0.5	<0.5	<0.5	<5	<5	<50
	10/10/01	149.24	19.92	129.32	--	--	--	--	--	--	--	--	--	--	--	--	--	
	11/19/01	149.24	20.55	128.69	<50	<50	--	<0.5	<0.5	<0.5	<0.5	19	<0.5	<0.5	<0.5	<5	<5	<50
	12/27/01	149.24	17.89	131.35	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/14/02	149.24	15.86	133.38	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2/4/02	149.24	14.51	134.73	820	<50	--	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	8.1	<5	<50
	3/14/02	149.24	11.34	137.90	--	--	--	--	--	--	--	--	--	--	--	--	--	
	4/4/02	149.24	11.49	137.75	--	--	--	--	--	--	--	--	--	--	--	--	--	
	5/7/02	149.24	12.69	136.55	1,200	<50	--	8.9	<0.5	<0.5	<0.5	8.5	<0.5	<0.5	<0.5	6.9	<5	<50
	7/23/02	148.06	15.81	132.25	--	--	--	--	--	--	--	--	--	--	--	--	--	
	8/5/02	148.06	16.15	131.91	1,000	<50	--	13	0.7	<0.5	1.5	9.6	<0.5	<0.5	<0.5	8.4	<20	<50
	11/18/02	148.06	18.96	129.10	<50	<50	--	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<5	<5	<50
	2/6/03	148.06	11.04	137.02	1,400	<50	--	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<5	<10	<50
	5/1/03	148.06	8.96	139.10	120	<50	--	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<5	<10	<50
	8/1/03	148.06	14.23	133.83	840	<50	--	0.67	<0.5	<0.5	<0.5	0.73	<0.5	<0.5	<0.5	5	--	--
	11/10/03	148.06	18.47	129.59	370	<50	--	9.2	<0.5	<0.5	5	0.53	<0.5	<0.5	<0.5	<5	<5	<50
	2/4/04	148.06	11.34	136.72	<50	<50	--	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	--	--	--	--	--
	6/28/04	148.06	14.69	133.37	66	<50	--	3.0	<0.5	<0.5	<0.5	0.5	<0.5	--	--	--	--	--
	9/8/04	148.06	17.13	130.93	<50	<50	--	2.1	<0.5	<0.5	<0.5	0.5	--	--	--	--	--	--
	12/2/04	148.06	18.66	129.40	<50	<50	--	<0.5	<0.5	<0.5	<0.5	0.5	--	--	--	--	--	--
	3/27/05	148.06	15.19	132.87	<50	<50	--	<0.5	<0.5	<0.5	<0.5	0.5	--	--	--	--	--	--
	6/14/05	148.06	13.48	134.58	<50	<50	--	<0.5	<0.5	<0.5	<0.5	0.5	--	--	--	--	--	--
	9/13/05	148.06	17.92	130.14	<50	<50	--	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	--	--	--	--	--
	12/28/05	148.06	12.01	136.05	<50	--	--	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	--	--	--	--	--
	3/6/06	148.06	9.31	138.75	<50	--	--	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	--	--	--	--	--
MW-3	7/28/99	148.62	13.40	135.22	<50	53	<500	<0.5	<0.5	<0.5	<0.5	100	--	--	--	--	--	--
	10/25/99	148.62	16.72	131.90	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	11	<1	<1	<1	<10	--	--
Screen	1/18/00	148.62	13.78	134.84	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	4.9	<1	<1	<1	<10	--	--
5'-25'	2/17/00	148.62	8.17	140.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/3/00	148.62	7.46	141.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/21/00	149.24	9.54	139.70	<50	<50	<170	<0.5	<0.5	<0.5	<0.5	6.9	<1	<1	<1	<10	--	--
	9/12/00	149.24	16.23	133.01	58	<50	-	<0.3	<0.3	<0.3	<0.3	0.6	89.7	<0.5	9.4	<0.5	<500	--
	10/16/00	149.24	17.13	132.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/16/00	149.24	17.52	131.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/14/00	149.24	17.67	131.57	68	<50	--	<0.3	<0.3	<0.3	<0.6	62.3	<0.5	3.8	<0.5	<5	--	--
	1/22/01	149.24	17.68	131.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/16/01	149.24	16.99	132.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/9/01	149.24	15.93	133.31	<200	<50	--	<1.2	<1.2	<1.2	<1.2	33.7	42.6	<2	<2	3.4	<2	--
	4/13/01	149.24	16.19	133.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/01	149.24	16.63	132.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/01	149.24	17.16	132.08	<50	<50	--	<0.5	<0.5	<0.5	<0.5	73	<0.5	7.7	<0.5	<5	--	--
	7/17/01	149.24	18.10	131.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/01	149.24	18.65	130.59	<50	<50	--	<0.5	<0.5	<0.5	<0.5	53	<0.5	3.7	<0.5	<5	<5	<50
	10/10/01	149.24	19.48	129.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/01	149.24	20.06	129.18	<50	<50	--	<0.5	<0.5	<0.5	<0.5	69	<0.5	3.4	<0.5	<5	<5	<100
	12/27/01	149.24	14.29	134.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	149.24	10.79	138.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	149.24	10.43	138.81	<50	<50	--	<0.5	<0.5	<0.5	<0.5	6.2	<0.5	<0.5	<0.5	<5	<5	<50
	3/14/02	149.24	8.34	140.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	149.24	9.08	140.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	149.24	10.57	138.67	<50	<50	--	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<5	<5	<50
	7/23/02	147.44	15.67	131.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	147.44	16.09	131.35	<50	<50	--	<0.5	<0.5	<0.5	<0.5	4.0	<0.5	<0.5	<0.5	<5	<5	95
	11/18/02	147.44	18.77	128.67	<50	<50	--	<0.5	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	<5	<5	68
	2/6/03	147.44	8.14	139.30	<50	62	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	5/1/03	147.44	6.56	140.88	<50	140	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	8/1/03	147.44	13.89	133.55	<50	81	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	--
	11/10/03	147.44	18.37	129.07	<50	89	--	<0.5	<0.5	<0.5	<0.5	2.0	<0.5	<0.5	<0.5	<5	<5	<50
	2/4/04	147.44	8.55	138.89	<50	82	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	6/28/04	147.44	14.15	133.29	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	9/8/04	147.44	16.93	130.51	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	12/2/04	147.44	18.31	129.13	<50	<50	--	<0.5	<0.5	<0.5	<0.5	0.68	--	--	--	--	--	--
	3/27/05	147.44	11.95	135.49	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	6/14/05	147.44	11.46	135.98	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
	9																	

Table 2
GROUNDWATER ELEVATION AND
ANALYTICAL RESULTS
Former Central BP Station
2160 Central Ave.
McKinleyville, California
Project No. NC-24

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	DIPE ($\mu\text{g/L}$)	TAME ($\mu\text{g/L}$)	ETBE ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	Ethanol	Methanol
																	($\mu\text{g/L}$)	($\mu\text{g/L}$)
MW-4	9/12/00	149.92	17.56	132.36	<50	<50	--	<0.3	<0.3	<0.3	<0.6	<2	<0.5	<0.5	<0.5	<500	--	--
	10/16/00	149.92	18.41	131.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/16/00	149.92	18.65	131.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/14/00	149.92	18.88	131.04	<50	<50	--	<0.3	<0.3	<0.3	<0.6	<2	<0.5	<0.5	<0.5	<0.5	--	--
	1/22/01	149.92	18.65	131.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/16/01	149.92	17.82	132.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/9/01	149.92	16.52	133.40	<50	<50	--	<0.3	<0.3	<0.3	<0.6	<2	<0.5	<0.5	<0.5	<0.5	--	--
	4/13/01	149.92	17.14	132.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/01	149.92	17.70	132.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/01	149.92	18.23	131.69	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	7/18/01	149.92	19.24	130.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/01	149.92	19.84	130.08	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	10/10/01	149.92	20.72	129.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/01	149.92	21.28	128.64	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	<50
	12/27/01	149.92	15.81	134.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	149.92	12.50	137.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	149.92	12.08	137.84	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	<50
	3/14/02	149.92	9.61	140.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	149.92	10.48	139.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	149.92	12.24	137.68	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	7/23/02	148.51	17.01	131.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	148.51	17.43	131.08	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	11	100
	11/18/02	148.51	20.01	128.50	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	<50
	2/6/03	148.51	9.33	139.18	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	5/1/03	148.51	7.67	140.84	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	<50
	8/1/03	148.51	15.18	133.33	<50	63	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	11/10/03	148.51	19.62	128.89	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	<50
	2/4/04	148.51	9.86	138.65	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	6/28/04	148.51	15.21	133.30	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	9/8/04	148.51	18.25	130.26	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	12/2/04	148.51	19.48	129.03	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	3/27/05	148.51	13.29	135.22	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	6/14/05	148.51	12.73	135.78	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	9/13/05	148.51	18.11	130.40	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	12/28/05	148.51	8.63	139.88	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	3/6/06	148.51	7.86	140.65	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
MW-5	9/12/00	149.02	15.83	133.19	69,300	5,240	--	566	7,310	2,690	9,570	28.5	<0.5	<0.5	<0.5	<500	--	--
	10/16/00	149.02	16.92	132.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/16/00	149.02	17.62	131.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/14/00	149.02	17.93	131.09	40,400	7,050	--	324	2,260	1,280	4,730	25	<2.5	<2.5	<2.5	<2.5	--	--
	1/22/01	149.02	17.86	131.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/16/01	149.02	17.22	131.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/9/01	149.02	16.56	132.46	36,500	--	--	523	3,950	1,240	4,750	21.2	<0.5	<0.5	<0.5	<0.5	--	--
	4/13/01	149.02	16.54	132.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/01	149.02	16.81	132.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/01	149.02	17.28	131.74	35,000	<2,500	--	400	2,800	1,200	4,300	12	<10	<10	<10	<100	--	--
	7/18/01	149.02	18.33	130.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/01	149.02	18.93	130.09	33,000	<2,800	--	130	1,300	920	2,900	<5	<5	<5	<5	<50	<50	<500
	10/10/01	149.02	19.82	129.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/01	149.02	20.43	128.59	30,000	<2,100	--	630	2,700	1,000	3,300	25	<10	<10	<10	<100	<100	<1,000
	12/27/01	149.02	17.45	131.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	149.02	15.48	133.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	149.02	13.98	135.04	72,000	<2,900	--	2,300	14,000	2,100	8,100	<50	<50	<50	<50	<500	<500	<5,000
	3/14/02	149.02	10.67	138.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	149.02	10.85	138.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	149.02	12.10	136.92	30,000	<500	--	1,100	3,700	940	3,300	<50	<5.0	<5.0	<5.0	<50	<50	<500
	7/23/02	147.64	15.37	132.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	147.64	15.73	131.91	55,000	<2,500	--	1,100	4,900	1,800	6,500	<20	<20	<20	<20	<200	<200	<2,000
	11/18/02	147.64	18.91	128.73	26,000	<3,500	--	220	450	930	1,900	33	<5	6.7	<5	<50	<50	<500
	2/6/03	147.64	10.32	137.32	2,300	<400	--	8.9	60	33	79	<5	<5	<5	<5	9.3	<20	<50
	5/1/03	147.64	8.27	139.37	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	8/1/03	147.64	13.81	133.83	8,800	<600	--	110	1,300	210	1,000	<5	<5	<5	<5	<50	<50	<500
	11/10/03	14																

Table 2
GROUNDWATER ELEVATION AND
ANALYTICAL RESULTS
Former Central BP Station
2160 Central Ave.
McKinleyville, California
Project No. NC-24

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	DIPE ($\mu\text{g/L}$)	TAME ($\mu\text{g/L}$)	ETBE ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	Ethanol ($\mu\text{g/L}$)	Methanol ($\mu\text{g/L}$)
MW-6	9/12/00	149.82	17.28	132.54	2,310	759	--	20.5	28.5	177	58.7	13.8	<0.5	<0.5	<0.5	<500	--	--
	10/16/00	149.82	18.23	131.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Screen	11/16/00	149.82	18.56	131.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5'-25'	12/14/00	149.82	18.82	131.00	1,790	670	--	12.9	2.5	175	9.9	8.1	<0.5	<0.5	<0.5	<0.5	--	--
	1/22/01	149.82	18.73	131.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/16/01	149.82	18.03	131.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/9/01	149.82	17.09	132.73	8,150	1,880	-	11.9	9.4	458	173	2.6	<0.5	<0.5	<0.5	<0.5	--	--
	4/13/01	149.82	17.38	132.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/01	149.82	17.82	132.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/01	149.82	18.33	131.49	4,400	<1,200	--	3.6	1.2	180	20	1.9	<1	<1	<1	<10	--	--
	7/18/01	149.82	19.31	130.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/01	149.82	19.86	129.96	1,900	<600	--	7.8	<0.5	17	1.3	3.6	<0.5	0.86	<0.5	<5	<5	<50
	10/10/01	149.82	20.73	129.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/01	149.82	21.27	128.55	2,100	<400	--	23	2.9	28	0.68	9.4	<0.5	2.3	<0.5	<5	<5	<100
	12/27/01	149.82	17.36	132.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	149.82	14.93	134.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	149.82	13.93	135.89	2,700	<400	--	0.8	<0.5	55	40	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	3/14/02	149.82	11.27	138.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	149.82	11.62	138.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	149.82	12.98	136.84	1,100	<200	--	<0.05	<0.5	24	1.2	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	7/23/02	148.42	16.84	131.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	148.42	17.23	131.19	2,600	<500	--	1.8	<0.5	100	<0.5	<0.5	<0.5	<0.5	<0.5	7.1	<15	<50
	11/18/02	148.42	19.94	128.48	370	<200	--	1.7	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	5.9	<5	<50
	2/6/03	148.42	10.78	137.64	460	<300	--	<0.5	<0.5	3.6	3.3	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	5/1/03	148.42	8.90	139.52	130	<150	--	<0.5	<0.5	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	8/1/03	148.42	15.11	133.31	830	<400	--	<0.5	<0.5	14	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	--
	11/10/03	148.42	19.44	128.98	740	<400	--	2.8	0.64	14	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	2/4/04	148.42	10.95	137.47	260	<200	--	<0.5	<0.5	<0.5	0.62	<0.5	--	--	--	--	--	--
	6/28/04	148.42	15.30	133.12	180	<100	--	<0.5	<0.5	2.6	<0.5	<0.5	--	--	--	--	--	--
	9/8/04	148.42	18.08	130.34	430	<400	--	0.7	<0.5	7.1	<0.5	<0.5	--	--	--	--	--	--
	12/2/04	148.42	19.43	128.99	92	<50	--	0.7	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/27/05	148.42	14.94	133.48	150	<100	--	<0.5	<0.5	1.6	2.0	<0.5	--	--	--	--	--	--
	6/14/05	148.42	14.26	134.16	490	<300	--	<0.5	<0.5	4.0	1.3	<0.5	--	--	--	--	--	--
	9/13/05	148.42	18.92	129.50	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/28/05	148.42	11.55	136.87	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/6/06	148.42	9.39	139.03	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
MW-7	9/12/00	149.53	16.26	133.27	324,000	6,380	--	18,300	46,100	7,650	33,200	<400	<0.5	<0.5	<0.5	<500	--	--
	10/16/00	149.53	17.44	132.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Screen	11/16/00	149.53	17.96	131.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5'-25'	12/14/00	149.53	18.27	131.26	87,200	2,910	--	12,100	28,800	3,220	14,090	81.3	<2.5	--	<2.5	2.5	--	--
	1/22/01	149.53	18.25	131.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/16/01	149.53	17.74	131.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/9/01	149.53	17.04	132.49	87,500	7,810	--	7,120	21,300	2,250	10,440	48.9	<0.5	<0.5	<0.5	<0.5	--	--
	4/13/01	149.53	17.12	132.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/01	149.53	17.40	132.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/01	149.53	17.89	131.64	120,000	<4,000	--	9,900	26,000	3,100	13,000	60	<50	<50	<50	<500	--	--
	7/18/01	149.53	18.72	130.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/17/01	149.53	19.23	130.30	86,000	<3,000	--	8,000	15,000	3,300	12,000	67	<50	<50	<50	<500	<500	<5,000
	10/10/01	149.53	19.89	129.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/01	149.53	20.64	128.89	88,000	<6,500	--	5,900	14,000	2,800	11,000	<50	<50	<50	<50	<500	<500	<5,000
	12/27/01	149.53	17.74	131.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	149.53	15.71	133.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	149.53	14.44	135.09	110,000	<10,200	--	960	12,000	3,600	16,000	<50	<50	<50	<500	<500	<500	<5,000
	3/14/02	149.53	10.88	138.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	149.53	11.18	138.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	149.53	12.49	137.04	180,000	<9,400	--	1,200	13,000	4,100	18,000	<25	<25	<25	<25	<250	<250	<2,500
	7/23/02	148.09	15.73	132.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	148.09	16.06	132.03	130,000	<4,500	--	1,200	15,000	3,900	16,000	<50	<50	<50	<50	<500	<500	<5,000
	11/18/02	148.09	19.12	128.97	110,000	<7,000	--	2,900	21,000	3,300	13,000	<100	<100	<100	<100	<1,000	<1,000	<10,000
	2/6/03	148.09	10.64	137.45	78,000	<26,000	--	200	3,100	3,600	13,000	<20	<20	<20	<20	<200	<200	<2,000
	5/1/03	148.09	8.57	139.52	41,000	<6,700	--	23	400	1,700	6,600	<5	<5	<5	<5	8.7	<50	--
	8/1/03	148.09	14.18	133.91	89,000	<25,000	--	340	4,700	4,300	18,000	<25	<25	<25	<25	<250	--	--
	11/10/03	148.09	18.53	129.56	77,000	<6,700	--	630	5,500	1,900	8,400	<25	<25	<25	<25	<250	<250	<2,500
	2/4/04	148.09	11.05	137.04	62,000	<8,000	--	110	1,900	2,700	11,000	<10	--	--	--	--	--	--
	6/28/04	148.09	14.58	133.51	77,000	<8,000	--	200	3,100	2,700	11,000	<20	--	--	--	--	--	--
	9/8/04	148.09	17.04	131.05	64,000	<10,000	--	320	2,400	2,600	11,000	<25	--	--	--	--	--	--
	12/2/04	148.09	18.64	129.45	44,000	<10,000	--	430	1,100	1,600	5,900	<10	--	--	--	--	--	--
	3/27/05	148.09	15.24	132.85														

Table 2
GROUNDWATER ELEVATION AND
ANALYTICAL RESULTS
Former Central BP Station
2160 Central Ave.
McKinleyville, California
Project No. NC-24

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	Ethyl-benzene													
					TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	ETBE (µg/L)	TBA (µg/L)	Ethanol (µg/L)	Methanol (µg/L)	
MW-8	8/17/01	148.75	18.58	130.17	540	<200	--	82	<0.5	1.4	3.8	23	<0.5	<0.5	<0.5	7.8	<5	<50
	10/10/01	148.75	19.36	129.39	--	--	--	--	--	--	--	--	--	--	--	--	--	
	11/19/01	148.75	19.99	128.76	870	<120	--	19	<0.5	11	<0.5	160	<0.5	2.2	4.6	15	<5	<50
	12/27/01	148.75	17.42	131.33	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/14/02	148.75	14.77	133.98	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2/4/02	148.75	13.48	135.27	1,200	<300	--	30	<0.5	<0.5	1.3	290	<0.5	4.9	4.3	32	<12	<650
	3/14/02	148.75	10.77	137.98	--	--	--	--	--	--	--	--	--	--	--	--	--	
	4/4/02	148.75	10.95	137.80	--	--	--	--	--	--	--	--	--	--	--	--	--	
	5/7/02	148.75	12.17	136.58	1,400	<100	--	110	0.51	<0.5	1.5	19	<0.5	<0.5	<0.5	9.6	<5	<50
	7/23/02	147.49	15.52	131.97	--	--	--	--	--	--	--	--	--	--	--	--	--	
	8/5/02	147.49	15.90	131.59	780	<200	--	90	<0.5	<0.5	0.96	40	<0.5	0.60	0.55	12	<5	<75
	11/18/02	147.49	18.53	128.96	380	100	--	46	<0.5	1.1	<0.5	89	<0.5	1.10	<0.5	16	<5	<50
	2/6/03	147.49	10.32	137.17	210	<50	--	10	<0.5	<0.5	<0.5	24	<0.5	<0.5	<0.5	12	<5	<50
	5/1/03	147.49	8.40	139.09	150	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	
	8/1/03	147.49	13.92	133.57	650	120	--	73	<0.5	<0.5	1.2	12	<0.5	<0.5	<0.5	28	--	--
	11/10/03	147.49	18.16	129.33	88	87	--	4	<0.5	<0.5	<0.5	78	<0.5	0.93	1.3	8.9	<5	<50
	2/4/04	147.49	10.78	136.71	120	<50	--	1.2	<0.5	<0.5	<0.5	4.2	--	--	--	--	--	--
	6/28/04	147.49	14.23	133.26	160	<50	--	22	<0.5	<0.5	0.91	9.6	--	--	--	--	--	--
	9/8/04	147.49	16.77	130.72	52	<50	--	15	<0.5	<0.5	<0.5	27	--	--	--	--	--	--
	12/2/04	147.49	18.17	129.32	380	<50	--	39	<0.5	11	<0.5	41	--	--	--	--	--	--
	3/27/05	147.49	14.97	132.52	<50	<50	--	<0.5	<0.5	<0.5	<0.5	0.85	--	--	--	--	--	--
	6/14/05	147.70	12.65	135.05	<50	52	--	<0.5	<0.5	<0.5	<0.5	0.68	--	--	--	--	--	--
	9/13/05	147.70	16.94	130.76	<50	<50	--	<0.5	<0.5	<0.5	<0.5	4.0	--	--	--	--	--	--
	12/28/05	147.70	11.56	136.14	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/6/06	147.70	9.08	138.62	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
MW-9	8/17/01	148.19	17.41	130.78	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<50
	10/10/01	148.19	18.09	130.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/01	148.19	18.66	129.53	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	
	12/27/01	148.19	16.10	132.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	148.19	14.09	134.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	148.19	12.88	135.31	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	
	3/14/02	148.19	9.91	138.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	148.19	10.05	138.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	148.19	11.27	136.92	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	
	7/23/02	147.00	14.27	132.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	147.00	14.64	132.36	<50	67	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	
	11/18/02	147.00	17.32	129.68	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	7.7	<50
	2/6/03	147.00	9.68	137.32	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	
	5/1/03	147.00	7.78	139.22	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	
	8/1/03	147.00	12.76	134.24	<50	74	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	11/10/03	147.00	16.95	130.05	<50	72	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50	
	2/4/04	147.00	10.16	136.84	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	6/28/04	147.00	13.11	133.89	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	9/8/04	147.00	15.47	131.53	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	12/2/04	147.00	17.02	129.98	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	3/27/05	147.00	13.23	133.77	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	6/14/05	147.00	11.61	135.39	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	9/13/05	147.00	14.73	132.27	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	12/28/05	147.00	8.66	138.34	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	3/6/06	147.00	7.47	139.53	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--

Table 2
GROUNDWATER ELEVATION AND
ANALYTICAL RESULTS
Former Central BP Station
2160 Central Ave.
McKinleyville, California
Project No. NC-24

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	Ethyl-benzene												
					TPHg ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	DIPE ($\mu\text{g/L}$)	TAME ($\mu\text{g/L}$)	ETBE ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	Ethanol ($\mu\text{g/L}$)	Methanol ($\mu\text{g/L}$)
MW-10	8/17/01	148.36	18.23	130.13	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50
	10/10/01	148.36	19.14	129.22	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/01	148.36	19.78	128.58	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	12/27/01	148.36	17.53	130.83	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	148.36	15.73	132.63	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	148.36	14.23	134.13	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	3/14/02	148.36	11.24	137.12	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	148.36	10.84	137.52	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	148.36	11.74	136.62	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	7/23/02	147.17	14.81	132.36	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	147.17	15.21	131.96	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	11/18/02	147.17	18.16	129.01	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	2/6/03	147.17	10.99	136.18	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	5/1/03	147.17	8.33	138.84	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	8/1/03	147.17	12.59	134.58	<50	86	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
	11/10/03	147.17	17.55	129.62	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	2/4/04	147.17	11.07	136.10	<50	96	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	6/28/04	147.17	13.23	133.94	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	9/8/04	147.17	16.07	131.10	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	12/2/04	147.17	17.77	129.40	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	3/27/05	147.17	14.17	133.00	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	6/14/05	147.17	12.43	134.74	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	9/13/05	147.17	16.18	130.99	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	12/28/05	147.17	12.46	134.71	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	3/6/06	147.17	8.16	139.01	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-11	8/17/01	147.99	18.28	129.71	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	10/10/01	147.99	19.21	128.78	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/01	147.99	19.83	128.16	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	12/27/01	147.99	17.49	130.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	147.99	15.45	132.54	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	147.99	14.07	133.92	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	3/14/02	147.99	11.71	136.28	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	147.99	11.19	136.80	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	147.99	11.80	136.19	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	7/23/02	146.79	14.91	131.88	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	146.79	15.39	131.40	<50	58	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	11/18/02	146.79	18.31	128.48	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	2/6/03	146.79	11.65	135.14	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	5/1/03	146.79	8.80	137.99	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	8/1/03	146.79	12.59	134.20	<50	79	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	11/10/03	146.79	17.71	129.08	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<50
	2/4/04	146.79	11.64	135.15	<50	95	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	6/28/04	146.79	13.18	133.61	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	9/8/04	146.79	16.26	130.53	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	12/2/04	146.79	17.90	128.89	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	3/27/05	146.79	14.45	132.34	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	6/14/05	146.79	12.54	134.25	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	9/13/05	146.79	16.07	130.72	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	12/28/05	146.79	13.03	133.76	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	3/6/06	146.79	8.66	138.13	<50	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--

Table 2
GROUNDWATER ELEVATION AND
ANALYTICAL RESULTS
Former Central BP Station
2160 Central Ave.
Mckinleyville, California
Project No. NC-24

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	DIPE ($\mu\text{g/L}$)	TAME ($\mu\text{g/L}$)	ETBE ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	Ethanol ($\mu\text{g/L}$)	Methanol ($\mu\text{g/L}$)
MW-12	8/17/01	147.93	18.31	129.62	590	<300	--	19	<0.5	<0.5	<0.5	19	<0.5	0.97	<0.5	38	<5	63
	10/10/01	147.93	19.20	128.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Screen	11/19/01	147.93	19.77	128.16	280	<150	--	7.9	<0.5	<0.5	<0.5	20	<0.5	1.3	<0.5	25	<5	<50
5'-25'	12/27/01	147.93	16.99	130.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/02	147.93	14.62	133.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/02	147.93	13.29	134.64	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	3/14/02	147.93	10.51	137.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/02	147.93	10.63	137.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/7/02	147.93	11.80	136.13	600	<100	--	22	<0.5	2.2	<0.5	0.92	<0.5	<0.5	<0.5	<5	<5	<50
	7/23/02	146.74	15.16	131.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/02	146.74	15.55	131.19	1,000	<200	--	49	0.71	37	20	3.7	<0.5	<0.5	<0.5	6.8	<5	<100
	11/18/02	146.74	18.36	128.38	99	<50	--	1	<0.5	<0.5	1.2	7.2	<0.5	0.59	<0.5	10	<5	<50
	2/6/03	146.74	10.19	136.55	560	<200	--	10	<0.5	4.8	<0.5	<1	<0.5	<0.5	<0.5	<5	<5	<50
	5/1/03	146.74	8.17	138.57	270	<100	--	9.3	<0.5	0.64	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	8/1/03	146.74	13.52	133.22	770	<300	--	28	<0.5	16	<0.5	1.1	<0.5	<0.5	<0.5	<5	--	--
	11/10/03	146.74	17.80	128.94	600	<200	--	12	<0.5	0.57	<0.5	0.69	<0.5	<0.5	<0.5	<5	<5	<50
	2/4/04	146.74	10.55	136.19	240	140	--	7.2	<0.5	4.3	<0.5	<0.5	--	--	--	--	--	--
	6/28/04	146.74	13.83	132.91	670	<200	--	7.4	<0.5	20	<0.5	<0.5	--	--	--	--	--	--
	9/8/04	146.74	16.37	130.37	970	<300	--	23	<0.5	27	<0.5	0.52	--	--	--	--	--	--
	12/2/04	146.74	17.91	128.83	<50	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/27/05	146.74	13.70	133.04	740	<200	--	10	<0.5	41	0.61	<0.5	--	--	--	--	--	--
	6/14/05	146.74	12.55	134.19	330	<50	--	2.8	<0.5	7.7	<0.5	<0.5	--	--	--	--	--	--
	9/13/05	146.74	16.64	130.10	300	<50	--	12	<0.5	1.7	<0.5	<0.5	--	--	--	--	--	--
	12/28/05	146.74	11.55	135.19	370	--	--	3.0	1.9	3.6	17	<0.5	--	--	--	--	--	--
	3/6/06	146.74	8.66	138.08	710	--	--	1.5	5.7	1.3	70	<0.5	--	--	--	--	--	--
MCL		--	--	--	1	150	300	1,750	5									
taste & odor threshold		5	100	--	--	42	29	17	5									
NCRWQCB Cleanup Goals		<50	100	--	0.50	42	29	17	5									

Notes:

New well survey per geotracker performed in July 2002 (NGS(PID#LV1170) Aluminum Cap HPGNDCA0109 (Vista Point, Hwy 101)

DTW data for the 9/13/05 sampling event was collected on 9/14/05 following redevelopment and sampling of MW-7 (all wells except MW-7 sampled on 9/13/05)

TOC: Top of casing referenced to benchmark at (NGS(PID#LV1170) Vista Point, Hwy 101 .

DTW: Depth to water as referenced to benchmark.

GWE: Ground water elevation as referenced to benchmark

$\mu\text{g/L}$ =micrograms per liter

--: Not analyzed, available, and / or applicable

MCL: Maximum contaminant level, an enforceable drinking water standard

Taste & odor threshold: A drinking water standard

NCRWQCB: North Coast Regional Water Quality Control Board

TPHg: Total petroleum hydrocarbons as gasoline by EPA Method 8260B

TPHmo: Total petroleum hydrocarbons as motor oil by EPA Method 3550/8015M

TPHd: Total petroleum hydrocarbons as diesel by EPA Method 3550/8015M

MTBE: Methyl tertiary butyl ether by EPA Method 8260B

DIPE: Di-isopropyl ether by EPA Method 8260B

TAME: Tertiary amyl methyl ether by EPA Method 8260B

ETBE: Ethyl tertiary butyl ether by Method 8260B

TBA: Tertiary butyl alcohol by EPA Method 8260B

Table 3
SVE Air Sample Analytical Results
ATC Permit #: NAC - 380
Former Central BP
2160 Central Avenue
Mckinleyville, California
Blue Rock Project No. NC-24

Sample I.D.	Sample Date	TPHg (mg/m3)	B (mg/m3)	T (mg/m3)	E (mg/m3)	X (mg/m3)	MTBE (mg/m3)
Inf 7/6/04 (all wells)	7/6/04	4,600	14	75	36	140	<0.5
Influent (all wells)	7/7/04	2,700	6.3	56	34	140	<0.8
VEW-1 Inf	7/8/04	3,500	42	330	82	340	1.6
VEW-2 Inf	7/8/04	2,500	5.3	90	41	190	<0.5
VEW-3 Inf	7/8/04	4,400	4.8	37	34	120	<0.5
VEW-4 Inf	7/8/04	2,200	1.5	13	27	92	<0.25
VEW-5 Inf	7/8/04	860	0.39	5	14	56	<0.2
VEW-6 Inf	7/8/04	98	<0.2	<0.2	<0.2	<0.2	<0.2
Inf 7/8/04 (all wells)	7/8/04	1,500	3.4	36	23	98	<0.25
Influent (all wells)	7/9/04	1,300	<0.4	1.1	12	47	<0.4
Influent 7/15/04	7/15/04	930	0.27	0.97	8.4	31	<0.2
Influent 7/22/04	7/22/04	970	0.3	0.94	8.1	29	<0.2
Influent 7/29/04	7/29/04	1,200	2.6	22	12	54	<0.2
Influent 8/26/04	8/26/04	3,000	5.8	32	17	95	<0.2
Influent 9/22/04	9/22/04	2,300	3.5	26	19	83	<0.6
Influent 10/14/04	10/14/04	2,700	5.8	47	27	110	<0.5
Influent 11/17/04	11/17/04	6,900	12	86	37	120	<0.5
Influent 12/21/04	12/21/04	4,200	29	120	27	94	<0.5
Influent 1/17/05	1/17/05	280	0.38	3	2.3	11	<0.2
Influent 2/7/05	2/7/05	1,600	6.70	52	14	54	<0.2
Influent 3/17/05	3/17/05	400	1.5	9.6	2.2	9.8	<0.2
Influent 3/18/05	3/18/05	1,000	3.8	26	6.7	28	<0.2
Influent 3/21/05	3/21/05	1,000	3.8	31	6.8	34	<0.2
Influent 3/22/05	3/22/05	1,500	5.4	32	7.1	34	<0.2
Influent 5/9/05	5/9/05	380	0.9	5	1.0	6	<0.2
Influent 6/9/05	6/9/05	990	3.6	20	4.0	18	<0.2
Influent 7/21/05	7/21/05	140	0.4	1.6	0.23	3.7	<0.2
Influent 8/30/05	8/30/05	1,200	7.0	37	3.4	26	<0.2
Influent 9/16/05	9/16/05	2,400	3.8	46	13	66	<0.2
Influent 10/27/05	10/26/05	2,100	6.1	62	14	91	<0.25
Influent 11/29/05	11/29/05	400	1.9	22	3.7	36	<0.2
Influent 12/20/05	12/20/05	440	0.4	7.0	1.10	26	<0.2
Influent 1/24/06	1/24/06	25	0.46	3.9	0.48	2.9	<0.2
Influent 2/24/06	2/24/06	360	3.0	29	5.7	41	<0.2
Influent 3/21/06	3/21/06	90	0.40	3.9	0.87	4.6	<0.2

Table 3
SVE Air Sample Analytical Results
ATC Permit #: NAC - 380
Former Central BP
2160 Central Avenue
Mckinleyville, California
Blue Rock Project No. NC-24

Sample I.D.	Sample Date	TPHg (mg/m3)	B (mg/m3)	T (mg/m3)	E (mg/m3)	X (mg/m3)	MTBE (mg/m3)
Eff 7/6/04	7/6/04	23	<0.2	0.26	<0.2	<0.2	<0.2
Effluent	7/7/04	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent	7/8/04	260	0.24	4.70	6.4	27	<0.2
Effluent	7/9/04	43	<0.2	0.63	0.17	3.9	<0.2
Effluent 7/15/04	7/15/04	<20	<0.2	<0.2	0.24	1.3	<0.2
Effluent 7/22/04	7/22/04	<20	<0.2	<0.2	<0.2	0.65	<0.2
Effluent 7/29/04	7/29/04	<20	<0.2	<0.2	<0.2	0.45	<0.2
Effluent 8/26/04	8/26/04	<20	<0.2	0.35	<0.2	0.4	<0.2
Effluent 9/22/04	9/22/04	100	0.22	2.6	1.2	6.9	<0.2
Effluent 10/14/04	10/14/04	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 11/17/04	11/17/04	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 12/21/04	12/21/04	54	0.32	0.66	<0.2	0.22	<0.2
Effluent 1/17/05	1/17/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 2/7/05	2/7/05	28	0.31	<0.2	<0.2	<0.2	<0.2
Effluent 3/17/05	3/17/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 3/18/05	3/18/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 3/21/05	3/21/05	24	<0.2	0.46	<0.2	<0.2	<0.2
Effluent 3/22/05	3/22/05	27	<0.2	0.34	<0.2	<0.2	<0.2
Effluent 5/9/05	5/9/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 6/9/05	6/9/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 7/21/05	7/21/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 8/30/05	8/30/05	22	<0.2	0.43	<0.2	<0.2	<0.2
Effluent 9/16/05	9/16/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 10/27/05	10/26/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 11/29/05	11/29/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 12/20/05	12/20/05	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 1/24/06	1/24/06	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 2/24/06	2/24/06	<20	<0.2	<0.2	<0.2	<0.2	<0.2
Effluent 3/21/06	3/21/06	<20	<0.2	<0.2	<0.2	<0.2	<0.2

Notes:

SVE	Soil vapor extraction and treatment system - 250 cfm catalytic oxidizer (catox)
Influent	Air sample collected from catox influent
Effluent	Air sample collected from catox effluent
Ops Time	Catox cumulative site operational hours
mg/m3	Milligrams per cubic meter
<#.##	Compound not detected at or below the reported laboratory detection limit
TPHg	Total Petroleum Hydrocarbons as gasoline EPA Method 8260B
BTEX	Benzene, Toluene, Ethylbenzene, and Total Xylenes by EPA Method 8260B
MTBE	Methyl tert-Butyl Ether by EPA Method 8260B

Table 4
SVE Operational Data
ATC Permit #: NAC - 380
Former Central BP
2160 Central Avenue
Eureka California
Blue Rock Project No. NC-24

Sample Location	Sample Date	Total Ops Time (hr)	Period Ops Time (hr)	TPHg (mg/m3)	SVE Wells On	Manifold Vacuum (in. w.c.)	Flow (scfm)	TPHg Yield (lb/hr)	Average TPHg Yield (lb/hr)	Average TPHg Yield (lbs/day)	Period Yield (lb)	Cumulative Yield (lb)
Influent	7/6/04	3.50	3.50	4,600	VW-1, 2, 3, 4 ,5, 6	29.0	158	2.72	2.72	65.35	10	10
Influent	7/7/04	21.2	17.7	2,700	VW-1, 2, 3, 4 ,5, 6	30.0	194	1.96	2.34	56.22	41	51
Influent	7/8/04	47.0	25.8	1,500	VW- 2, 4 ,6	35.0	182	1.02	1.49	35.82	39	90
Influent	7/9/04	71.6	24.6	1,300	VW- 2, 4 ,6	35.0	178	0.87	0.94	22.67	23	113
Influent	7/15/04	217.0	145.4	930	VW- 2, 4 ,6	35.0	183	0.64	0.75	18.05	109	223
Influent	7/22/04	386.1	169.1	970	VW- 2, 4 ,6	35.0	237	0.86	0.75	17.99	127	349
Influent	7/29/04	553.0	166.9	1,200	VW-1, 2, 3, 4 ,5, 6	35.0	199	0.89	0.88	21.07	147	496
Influent	8/26/04	1,150.0	597.0	3,000	VW-1, 2, 3, 4 ,5, 6	35.0	150	1.69	1.29	30.96	770	1,266
Influent	9/22/04	1,793.0	643.0	2,300	VW-1, 2, 3, 4 ,5, 6	35.0	118	1.02	1.35	32.43	869	2,135
Influent	10/14/04	2,322.0	529.0	2,700	VW-1,4,6	35.0	257	2.60	1.81	43.39	956	3,091
Influent	11/17/04	3,000.0	678.0	6,900	VW-2,3,5	22.0	140	3.62	3.11	74.62	2108	5,199
Influent	12/21/04	3,430.0	430.0	4,200	VW- 3,4,6	15.0	180	2.83	3.23	77.41	1387	6,586
Influent	1/17/05	4,016.0	586.0	280	VW- 3,4,5,6	20.0	222	0.23	1.53	36.78	898	7,484
Influent	2/7/05	4,471.0	455.0	1,600	VW- 3,4,5,6	15.0	207	1.24	0.74	17.68	335	7,820
Influent	3/17/05	4,505.0	34.0	400	VW- 3,4,5,6	30.0	262	0.39	0.82	19.60	28	7,847
Influent	3/18/05	4,533.0	28.0	1,000	VW- 3,4,5,6	30.0	282	1.06	0.72	17.39	20	7,868
Influent	3/21/05	4,557.0	24.0	1,000	VW- 3,4,5,6	22.0	268	1.00	1.03	24.72	25	7,892
Influent	3/22/05	4,565.0	8.0	1,500	VW- 3,4,5,6	20.0	252	1.42	1.21	29.04	10	7,902
Influent	5/9/05	4,860.0	295.0	380	VW- 3,4,5,6	15.0	244	0.35	0.88	21.16	260	8,162
Influent	6/9/05	5,520.0	660.0	990	VW- 3,4,5,6	15.0	223	0.83	0.59	14.09	388	8,550
Influent	7/21/05	6,370.0	850.0	140	VW- 3,4,5,6	15.0	222	0.12	0.47	11.32	401	8,951
Influent	8/30/05	7,258.0	888.0	1,200	VW- 3,4,5,6	15.0	202	0.91	0.51	12.29	455	9,406
Influent	9/16/05	7,402.0	144.0	2,400	VW- 3,4,5,6	15.0	273	2.45	1.68	40.35	242	9,648
Influent	10/27/05	8,077.0	675.0	2,100	VW- 3,4,5,6	15.0	251	1.97	2.21	53.15	1495	11,143
Influent	11/29/05	8,867.0	790.0	400	VW- 3,4,5,6	15.0	235	0.35	1.16	27.92	919	12,062
Influent	12/20/05	9,271.0	404.0	440	VW- 3,4,5,6	15.0	208	0.34	0.35	8.34	140	12,202
Influent	1/24/06	9,663.0	392.0	25	VW- 3,4,5,6	15.0	263	0.02	0.18	4.41	72	12,274
Influent	2/24/06	10,239.0	576.0	360	VW- 3,4,5,6	10.0	235	0.32	0.17	4.10	98	12,372
Influent	3/21/06	10,786.0	547.0	90	VW-2, 3,4,5,6	20.0	296	0.10	0.21	5.00	114	12,486

Cumulative TPHg Recovery (pounds)	12,486
Cumulative TPHg Recovery (gallons)	2,054

Notes:

- SVE Soil vapor extraction and treatment system - 250 cfm catalytic oxidizer (catox)
Influent Air sample collected from thermox influent
Total Ops Time thermox cumulative site operational hours
Period Ops Time Operational period: number of system operating hours since last influent air sampling
TPHg Total Petroleum Hydrocarbons as gasoline EPA Method 8260B
mg/m3 Milligrams per cubic meter
<### Compound not detected at or below the reported laboratory detection limit
Vacuum Vacuum applied to well manifold
in. w.c. Inches water column
Flow Process volumetric flow (Q) measured with a flow averaging pitot tube
scfm Standard cubic feet per minute
lb Pound
TPHg Yield Approximate TPHg yield (lb/hr) based on influent analytical data and air flow (Q) for a given date
Yield (lbs/hr) = Influent concentration (mg/m3) x Q (scfm) x (m3/35.31 ft3) x 60 min/hr x lb/453,592 mg
Yield (lbs/day) = Yield (lbs/hr) x (24 hr/day)
Avg. TPHg Yield Average hydrocarbon yield during a given operational period;
based upon arithmetic average of TPHg yield at beginning and end of operational period.
Period Yield The Period Ops Time (hr) x Average TPHg yield (lbs/hr) during that period.
Note that this value is an approximation only, and may not account for daily fluctuations in yield.

Cumulative Recovery Estimated Estimated total SVE system TPHg recovery since startup.

Table 5
SVE Catox System Treatment Data
ATC Permit #: NAC - 380
Former Central BP
2160 Central Avenue
Blue Rock Project No. NC-24

AQMD Permit Requirements:	Sample Date	Ops Time (hr)	TPHg (mg/m ³)	TPHg DE (%)	Flow (scfm)	Daily Emissions Rate
						TPHg (lb/day)
Influent Effluent	7/6/04	NA	NA	NA	<250	219.12
Influent Effluent	7/6/04	3.50	4,600 23	99.5%	158	0.33
Influent Effluent	7/7/04	21	2,700 <20	>99.3%*	194	<0.35*
Influent Effluent	7/8/04	47	1,500 260	82.7%	182	4.25
Influent Effluent	7/9/04	72	1,300 43	96.7%	178	0.69
Influent Effluent	7/15/04	217	930 <20	>97.8%*	183	<0.33*
Influent Effluent	7/22/04	386	970 <20	>97.9%*	237	<0.43*
Influent Effluent	7/29/04	553	1,200 <20	>98.3%*	199	<0.36*
Influent Effluent	8/26/04	1,150	3,000 <20	>99.3%*	150	<0.27*
Influent Effluent	9/22/04	1,793	2,300 100	95.7%	118	1.06
Influent Effluent	10/14/04	2,322	2,700 <20	>99.3%*	257	<0.46*
Influent Effluent	11/17/04	3,000	6,900 <20	>99.7%*	140	<0.25*
Influent Effluent	12/21/04	3,430	4,200 <20	>99.5%*	180	<0.32*
Influent Effluent	1/17/05	4,016	280 <20	>92.9%*	222	<0.40*
Influent Effluent	2/7/05	4,471	1,600 28	98.3%	207	0.52
Influent Effluent	3/17/05	4,505	400 <20	>95.0%*	262	<0.47*
Influent Effluent	3/18/05	4,533	1,000 <20	>98.0%*	282	0.51
Influent Effluent	3/21/05	4,557	1,000 24	97.6%	268	<0.58
Influent Effluent	3/22/05	4,565	1,500 27	98.2%	252	0.61
Influent Effluent	5/9/05	4,860	380 <20	>94.7%*	244	<0.44*

Table 5
SVE Catox System Treatment Data
ATC Permit #: NAC - 380
Former Central BP
2160 Central Avenue
Blue Rock Project No. NC-24

	Sample Date	Ops Time (hr)	TPHg (mg/m ³)	TPHg DE (%)	Flow (scfm)	Daily Emissions Rate
						TPHg (lb/day)
AQMD Permit Requirements:	monthly	NA	NA	NA	<250	219.12
Influent Effluent	6/9/05 6/9/05	5,520	990 <20	>98.0%*	223	<0.40*
Influent Effluent	7/21/05 7/21/05	6,370	140 <20	>85.7%*	222	<0.40*
Influent Effluent	8/30/05 8/30/05	7,258	1,200 22	98.3%	202	0.40
Influent Effluent	9/16/05 9/16/05	7,402	2,400 <20	>99.2%*	273	<0.49*
Influent Effluent	10/27/05 10/27/05	8,077	2,100 <20	>99.0%*	251	<0.42*
Influent Effluent	11/29/05 11/29/05	8,867	400 <20	>95.0%*	235	<0.45*
Influent Effluent	12/20/05 12/20/05	9,271	440 <20	>95.0%*	208	<0.36*
Influent Effluent	1/24/06 1/24/06	9,663	25 <20	>20.0%*	263	<0.45*
Influent Effluent	2/24/06 2/24/06	10,239	360 <20	>94.0%*	235	<0.40*
Influent Effluent	3/21/06 3/21/06	10,786	90 <20	>77.0%*	296	<0.51*
				Avg.TPHg DE (%)	Avg. Flow (cfm)	Avg. Daily Emissions TPHg (lb/day)
				>83.4%	218	<0.58

System Operations/Emissions In Compliance: YES

SVE	Soil vapor extraction and treatment system - 250 cfm catalytic oxidizer (catox)
Influent	Air sample collected from catox influent
Effluent	Air sample collected from catox effluent (exhaust)
Ops Time	catox cumulative site operational hours
TPHg	Total Petroleum Hydrocarbons as gasoline by EPA Method 8260B
mg/m ³	Milligrams per cubic meter
<##.##	Compound not detected at or below the reported laboratory detection limit
Avg.	Average (averages based on monthly and startup data)
Flow	Process volumetric flow (Q) measured with a flow averaging pitot tube
scfm	Standard cubic feet per minute
lb	Pound
TPHg DE	TPHg (laboratory analyzed) destruction efficiency based on equation : TPHg DE = (influent concentration TPHg - effluent concentration TPHg)/influent concentration TPHg x 100
Emissions Rate	Analyte Emissions Rate (lb/day) based upon effluent analytical data and air flow volume (Q) for a given date Emiss. Rate = Effluent concentration (mg/m ³) x Q (scfm) x (m ³ /35.31 ft ³) x 1440 min/day x lb/453,592 mg Emiss. Rate = Effluent concentration (mg/m ³) x Q (scfm) x 8.9908 E-5

* Indicates that detection limit of "non-detect" effluent sample was used as concentration value to calculate DE and emissions as most conservative, worst-case scenario.

Table 6
SVE Catox Emissions Calculations
ATC Permit # NAC - 380
Former Central BP
2160 Central Ave.
McKinleyville, CA
Blue Rock Project No. NC - 24

Effluent Contaminant Concentrations

Sample ID	TPHg (mg/m ³)	TPHg (ppmv)	Benzene (mg/m ³)	Benzene (ppmv)	Toluene (mg/m ³)	Toluene (ppmv)	Ethlybenz. (mg/m ³)	Ethlybenz. (ppmv)	Xylenes (mg/m ³)	Xylenes (ppmv)	MTBE (mg/m ³)	MTBE (ppmv)
AQMD Limits	3,569		0.138		2.4		2.74		11.61		0.069	
EFF 7/6/04	23	5.4	0.20	0.050	0.26	0.063	0.20	0.050	0.20	0.050	0.20	0.10
EFF 7/7/04	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 7/8/04	260	61	0.24	0.068	4.70	1.15	6.4	1.4	27	5.8	0.20	0.10
EFF 7/9/04	43	10	0.20	0.050	0.63	0.15	0.79	0.17	3.9	0.82	0.20	0.10
EFF 7/15/04	20	5.0	0.20	0.050	0.20	0.050	0.24	0.051	1.3	0.28	0.20	0.10
EFF 7/22/04	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.65	0.14	0.20	0.10
EFF 7/29/04	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.45	0.095	0.20	0.10
EFF 8/26/04	20	5.0	0.20	0.050	0.35	0.084	0.20	0.050	0.40	0.10	0.20	0.10
EFF 9/22/04	100	24	0.22	0.063	2.60	0.64	1.2	0.24	6.9	1.5	0.20	0.10
EFF 10/14/04	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 11/17/04	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 12/21/04	54	13	0.32	0.093	0.66	0.16	0.20	0.050	0.20	0.050	0.20	0.10
EFF 1/17/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 2/7/05	28	6.5	0.20	0.050	0.31	0.075	0.20	0.050	0.20	0.050	0.20	0.10
EFF 3/17/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 3/18/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 3/21/05	24	6.2	0.20	0.050	0.46	0.12	0.20	0.050	0.20	0.050	0.20	0.10
EFF 3/22/05	27	6.8	0.20	0.050	0.34	0.090	0.20	0.050	0.20	0.050	0.20	0.10
EFF 5/9/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 6/9/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 7/21/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 8/30/05	22	5.5	0.20	0.050	0.43	0.11	0.20	0.050	0.20	0.050	0.20	0.10
EFF 9/16/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 10/27/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 11/29/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 12/20/05	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 1/24/06	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 2/24/06	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
EFF 3/21/06	20	5.0	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.10
AQMD Compliance	yes		yes		yes		yes		yes		yes	

Note: **Bold** values shown above are actual detected concentrations, whereas plain values shown above are detection limits of "non-detect" samples used for the sake of worst case scenario emissions calculations (actual concentrations are lower).

Table 6
SVE Catox Emissions Calculations
ATC Permit # NAC - 380
Former Central BP
2160 Central Ave.
McKinleyville, CA
Blue Rock Project No. NC - 24

Emissions Calculation Variables																
	A	B1	B2	B3	B4	B5	B6	C	D	E1	E2	E3	E4	E5	E6	
	Q2 (scfm)	TPHg	Benzene	Toluene	Ethylbenz.	Xylenes	MTBE	conversion (min/day)	conversion 1/360	TPHg (mw) (lb/mol)	Benz (mw) (lb/mol)	Toluene (mw) (lb/mol)	Ethylben (mw) (lb/mol)	Xylenes (mw) (lb/mol)	MTBE (mw) (lb/mol)	
ppmv/1,000,000																
EFF 7/6/04	158	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 7/7/04	197	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 7/8/04	182	0.00006	0.0000001	0.00000011	0.000000136	0.00000580	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 7/9/04	178	0.00001	0.0000001	0.0000002	0.00000017	0.00000082	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 7/15/04	183	0.00001	0.0000001	0.0000001	0.00000005	0.00000028	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 7/22/04	237	0.00001	0.0000001	0.0000001	0.00000005	0.00000014	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 7/29/04	199	0.00001	0.0000001	0.0000001	0.00000005	0.00000009	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 8/26/04	150	0.00001	0.0000001	0.0000001	0.00000005	0.00000010	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 9/22/04	118	0.00002	0.0000001	0.0000006	0.00000024	0.00000153	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 10/14/04	257	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 11/17/04	140	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 12/21/04	180	0.00001	0.0000001	0.0000002	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 1/17/05	222	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 2/7/05	207	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 3/17/05	262	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 3/18/05	282	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 3/21/05	268	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 3/22/05	252	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 5/9/05	244	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 6/9/05	223	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 7/21/05	222	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 8/30/05	202	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 9/16/05	273	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 10/27/05	251	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 11/29/05	235	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 12/20/05	208	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 1/24/06	263	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 2/24/06	235	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	
EFF 3/21/06	296	0.00001	0.0000001	0.0000001	0.00000005	0.00000005	0.00000010	1440	0.0028	86.2	78.1	106.2	92.1	106.2	88.2	

Table 6
SVE Catox Emissions Calculations
ATC Permit # NAC - 380
Former Central BP
2160 Central Ave.
McKinleyville, CA
Blue Rock Project No. NC - 24

Hydrocarbons Emissions:						
	TPHg (lb/day)	Benzene (lb/day)	Toluene (lb/day)	Ethylbenzene (lb/day)	Xylenes (lb/day)	MTBE (lb/day)
AQMD Permit Limits	219.12	0.0601	1.234	1.621	6.869	0.034
EFF 7/6/04	0.29	0.0001	0.004	0.003	0.003	0.006
EFF 7/7/04	0.34	0.0002	0.004	0.004	0.004	0.007
EFF 7/8/04	3.83	0.0002	0.089	0.091	0.448	0.006
EFF 7/9/04	0.61	0.0002	0.012	0.011	0.062	0.006
EFF 7/15/04	0.32	0.0002	0.004	0.003	0.022	0.006
EFF 7/22/04	0.41	0.0002	0.005	0.004	0.014	0.008
EFF 7/29/04	0.34	0.0002	0.004	0.004	0.008	0.007
EFF 8/2/04	0.26	0.0001	0.005	0.003	0.006	0.005
EFF 9/22/04	0.98	0.0001	0.032	0.011	0.077	0.004
EFF 10/14/04	0.44	0.0002	0.005	0.005	0.005	0.009
EFF 11/17/04	0.24	0.0001	0.003	0.003	0.003	0.005
EFF 12/21/04	0.81	0.0003	0.012	0.003	0.004	0.006
EFF 1/17/05	0.38	0.0002	0.005	0.004	0.005	0.008
EFF 2/7/05	0.46	0.0002	0.007	0.004	0.004	0.007
EFF 3/17/05	0.45	0.0002	0.006	0.005	0.006	0.009
EFF 3/18/05	0.49	0.0003	0.006	0.005	0.006	0.010
EFF 3/21/05	0.57	0.0003	0.014	0.005	0.006	0.009
EFF 3/22/05	0.59	0.0002	0.010	0.005	0.005	0.009
EFF 5/9/05	0.42	0.0002	0.005	0.004	0.005	0.009
EFF 6/9/05	0.38	0.0002	0.005	0.004	0.005	0.008
EFF 7/21/05	0.38	0.0002	0.005	0.004	0.005	0.008
EFF 8/30/05	0.38	0.0002	0.009	0.004	0.004	0.007
EFF 9/16/05	0.47	0.0003	0.006	0.005	0.006	0.010
EFF 10/27/05	0.43	0.0002	0.005	0.005	0.005	0.009
EFF 11/29/05	0.40	0.0002	0.005	0.004	0.005	0.008
EFF 12/20/05	0.36	0.0002	0.004	0.004	0.004	0.007
EFF 1/24/06	0.45	0.0002	0.006	0.005	0.006	0.009
EFF 2/24/06	0.40	0.0002	0.005	0.004	0.005	0.008
EFF 3/21/06	0.51	0.0003	0.006	0.005	0.006	0.010
AQMD Compliance	yes	yes	yes	yes	yes	yes

Note: Emissions rates shown above represent conservative, worst scenario because the effluent concentrations are often "non-detect" and the detection limit is used for calculation of emission rate. Thus, actual emission rate is often lower.

Calculations:

$$\begin{aligned} \text{TPHg (lb/day)} &= A * B1 * C * D * E1 \\ \text{Benzene (lb/day)} &= A * B2 * C * D * E2 \\ \text{Toluene (lb/day)} &= A * B3 * C * D * E3 \\ \text{Ethylbenzene (lb/day)} &= A * B4 * C * D * E4 \\ \text{Xylenes (lb/day)} &= A * B5 * C * D * E5 \\ \text{MTBE (lb/day)} &= A * B6 * C * D * E6 \end{aligned}$$

where:

$$\begin{aligned} A: &\text{ flow rate in standard cubic feet per minute (scfm)} \\ B1: &\text{ (Concentration of TPHg in ppmv)/1,000,000} \\ B2: &\text{ (Concentration of Benzene in ppmv)/1,000,000} \\ B3: &\text{ (Concentration of Toluene in ppmv)/1,000,000} \\ B4: &\text{ (Concentration of Ethylbenzene in ppmv)/1,000,000} \\ B5: &\text{ (Concentration of Xylenes in ppmv)/1,000,000} \\ B6: &\text{ (Concentration of MTBE in ppmv)/1,000,000} \\ C: &\text{ Conversion from minutes to day} \\ D: &\text{ Conversion for standard conditions (Assume Ideal Gas Law holds true)} \\ E1: &\text{ Molecular weight of TPHg - 86.2 lb/lb-mol} \\ E2: &\text{ Molecular weight of Benzene - 78.1 lb/lb-mol} \\ E3: &\text{ Molecular weight of Toluene - 106.2 lb/lb-mol} \\ E4: &\text{ Molecular weight of Ethylbenzene - 92.1 lb/lb-mol} \\ E5: &\text{ Molecular weight of Xylenes - 106.2 lb/lb-mol} \\ E6: &\text{ Molecular weight of MTBE - 88.2 lb/lb-mol} \end{aligned}$$

Table 7
SOIL ANALYTICAL DATA
Former Central BP Station
2160 Central Ave.
McKinleyville, CA

Sample ID	Sample Depth (feet bgs)	Sample Date	Soil													
			TPHg (mg/Kg)	TPHd (mg/Kg)	TPHmo (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	MTBE (mg/Kg)	DIPE (mg/Kg)	TAME (mg/Kg)	ETBE (mg/Kg)	TBA (mg/Kg)	Methanol (mg/Kg)	Ethanol (mg/Kg)
Tank Removal																
PIS-1	11	8/8/98	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
PIS-2	11	8/8/98	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
LS-3	11	8/8/98	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
LS-4	11	8/8/98	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
LS-5	11	8/8/98	3	--	--	<0.005	<0.005	<0.005	<0.005	0.075	--	--	--	--	--	--
LS-6	11	8/8/98	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
LS-7	11	8/8/98	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
SP-1	11	8/8/98	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
SP-2	11	8/8/98	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--
BS-1	11	8/6/98	2,300	--	--	<0.50	7.0	38	240	<0.50	--	--	--	--	--	--
BS-2	11	8/6/98	160	--	--	<0.05	0.35	0.21	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	--	--
BS-3	11	8/6/98	1,200	--	--	<0.20	1.5	9.8	54	<0.20	<0.20	<0.20	<0.20	<0.20	--	--
BS-4	11	8/6/98	130	--	--	<0.05	0.26	0.44	1.6	<0.05	--	--	--	--	--	--
BS-5	11	8/6/98	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	--
Overexcavation																
SW-10	S. Side @ 6'	8/8/98	5,300	--	--	<0.0050	<0.0050	3.3	72	<0.050	--	--	--	--	--	--
SW-11	S. Side @ 14'	8/8/98	<1.0	--	--	<0.0050	<0.0050	2	9.5	<0.050	--	--	--	--	--	--
SW-12	W. Side @ 6'	8/8/98	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	--	--	--	--	--	--
SW-13	W. Side @ 14'	8/8/98	220	--	--	0.14	<1.6	2	7.5	0.89	--	--	--	--	--	--
SW-14	N. Side @ 6'	8/8/98	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	--	--	--	--	--	--
SW-15	N. Side @ 14'	8/8/98	<1.0	--	--	0.0071	0.0083	0.011	0.036	<0.050	--	--	--	--	--	--
SW-16	E. Side @ 6'	8/8/98	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	--	--	--	--	--	--
SW-17	E. Side @ 14'	8/8/98	120	--	--	0.13	1.3	1.8	8.6	<0.050	--	--	--	--	--	--

SOIL ANALYTICAL DATA
 Former Central BP Station
 2160 Central Ave.
 McKinleyville, CA

Site Investigation		Soil															
Sample ID	Sample Date	Depth (feet bgs)	TPHg (mg/Kg)	TPHd (mg/Kg)	TPHmo (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	MTBE (mg/Kg)	DIPE (mg/Kg)	TAME (mg/Kg)	ETBEE (mg/Kg)	TBA (mg/Kg)	Methanol (mg/Kg)	Ethanol (mg/Kg)	Total Lead (µg/g)
B-1	5.5-6	7/19/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
B-1	10.5 - 11	7/19/99	<1.0	3.2	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
B-1	13.5 - 16	7/19/99	76	3.5	<10	<0.025	0.75	0.76	4.1	<0.025	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	3.3
B-1	20.5 - 21	7/19/99	11	<1.0	<10	0.98	1.2	0.20	0.88	0.081	--	--	--	--	--	--	--
B-1	25.5 - 26	7/19/99	6.7	<1.0	<10	0.96	0.096	0.12	0.328	0.973	--	--	--	--	--	--	--
B-2	5.5 - 6	7/19/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
B-2	10.5 - 11	7/19/99	220	13	<10	<0.005	<0.005	0.21	1.56	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
B-2	13.5 - 16	7/19/99	3200	18	11	<10	19	160	52	285	<0.5	<2.0	<2.0	<2.0	<2.0	<2.0	3.6
B-2	20.5 - 21	7/19/99	11	<1.0	<10	1.1	1.2	0.11	0.53	0.068	--	--	--	--	--	--	--
B-2	23.5 - 24	7/19/99	6.0	<1.0	<10	0.58	0.8	0.07	0.33	0.051	--	--	--	--	--	--	--
B-3	10.5 - 11	7/19/99	36	4.7	<10	<0.005	<0.005	<0.005	<0.005	0.051	--	--	--	--	--	--	--
B-3	13.5 - 16	7/19/99	7.2	<1.0	<10	0.70	0.430	0.084	0.460	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
B-3	20.5 - 21	7/19/99	630	5.1	<10	<2.4	<2.8	4.4	28.1	<1.0	--	--	--	--	--	--	--
B-3	23.5 - 24	7/19/99	44	<1.0	<10	1.9	1.7	0.58	2.58	0.16	--	--	--	--	--	--	--
B-4	10.5 - 11	7/19/99	<1.0	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
B-4	13.5 - 16	7/19/99	24	<1.0	<1.0	<1.0	<0.005	0.011	0.063	0.208	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
B-4	20.5 - 21	7/19/99	<1.0	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
B-4	23.5 - 24	7/19/99	<1.0	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-1 (MS)	10	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-1 (MS)	15	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-1 (MS)	20	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-1 (MS)	25	7/20/99	<1.0	1.2	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-2 (MS)	11	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-2 (MS)	15.5	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-2 (MS)	20	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-2 (MS)	25	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-2 (MS)	6	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-3 (MS)	10.5 - 11	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-3 (MS)	13.5 - 16	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-3 (MS)	20.5 - 21	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-3 (MS)	25.5 - 26	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--
MW-3 (MS)	5.5 - 6	7/20/99	<1.0	<1.0	<10	<0.005	<0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--

Table 7
SOIL ANALYTICAL DATA
Former Central BP Station
2160 Central Ave.
McKinleyville, CA

Sample ID	Sample Depth (feet bgs)	Soil														
		TPHg (mg/Kg)	TPHd (mg/Kg)	TPHmo (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	MTBE (mg/Kg)	DIPE (mg/Kg)	TAME (mg/Kg)	ETBE (mg/Kg)	TBA (mg/Kg)	Methanol (mg/Kg)	Ethanol (mg/Kg)	Total Lead (µg/g)
B-A	5	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-A	10	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-A	15	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-A	20	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-B	5	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-B	10	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-B	15	8/30/00	4,990	1,430	--	<0.075	6.01	46.2	131	<0.3	<0.075	<0.075	<0.075	<75	--	--
B-B	20	8/30/00	12,900	<10	--	0.072	0.908	0.216	0.935	0.01	<0.005	<0.005	<0.005	<5	--	--
B-C	5	8/30/00	<0.06	<10	--	<0.005	0.014	<0.005	0.036	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-C	10	8/30/00	<0.06	<10	--	<0.005	0.007	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-C	15	8/30/00	770	179	--	0.66	3.99	1.29	45.2	<0.025	<0.025	<0.025	<0.025	<25	--	--
B-C	20	8/30/00	0.133	<10	--	0.124	0.366	0.07	0.349	0.013	<0.005	<0.005	<0.005	<5	--	--
B-D (MW-7)	5	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-D (MW-7)	10	8/30/00	380	376	--	<0.025	<0.025	1.2	5.99	<0.025	<0.025	<0.025	<0.025	<25	--	--
B-D (MW-7)	15	8/30/00	1,170	305	--	1.05	35.7	18.7	92.1	<0.075	<0.075	<0.075	<0.075	<5	--	--
B-D (MW-7)	20	8/30/00	0.284	<10	--	0.084	0.073	0.056	0.244	0.016	<0.005	<0.005	<0.005	<5	--	--
B-E	5	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-E	10	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-E	15	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-E	20	8/30/00	0.096	<10	--	0.006	0.01	0.047	0.068	0.012	<0.005	<0.005	<0.005	<5	--	--
B-F	5	8/30/00	0.247	<10	--	<0.005	0.025	0.019	0.131	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-F	10	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-F	15	8/30/00	106	17	--	<0.005	0.406	0.579	3.53	<0.025	<0.025	<0.025	<0.025	<25	--	--
B-F	20	8/30/00	0.206	<10	--	0.306	0.494	0.051	0.349	0.022	<0.005	<0.005	<0.005	<5	--	--
B-G	5	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-G	10	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-G	15	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.018	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-G	20	8/30/00	<0.06	<10	--	<0.005	<0.005	0.017	0.054	<0.005	<0.005	0.011	<0.005	<5	--	--
B-H	5	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-H	10	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-H	15	8/30/00	<0.06	<10	--	0.015	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<5	--	--
B-H	20	8/30/00	0.22	<10	--	0.185	0.067	0.07	0.376	0.302	<0.005	0.008	0.010	<5	--	--

Table 7
SOIL ANALYTICAL DATA
Former Central BP Station
2160 Central Ave.
McKinleyville, CA

Sample ID	Sample Depth (feet bgs)	Soil														
		TPHg (mg/Kg)	TPHd (mg/Kg)	TPHmo (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	MTBE (mg/Kg)	DIPE (mg/Kg)	TAME (mg/Kg)	ETBE (mg/Kg)	TBA (mg/Kg)	Methanol (mg/Kg)	Ethanol (mg/Kg)	Total Lead (µg/g)
MW-4	5	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-4	10	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-4	15	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-4	20	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-5	5	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-5	10	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-5	15	8/30/00	0.114	<10	--	0.024	0.142	0.073	0.185	<0.005	<0.005	<0.005	<5	--	--	--
MW-5	20	8/30/00	0.093	<10	--	0.083	0.487	0.073	0.285	0.016	<0.005	<0.005	<5	--	--	--
MW-6	5	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-6	10	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-6	15	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-6	20	8/30/00	<0.06	<10	--	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<5	--	--	--
MW-8	15	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--
MW-8	20	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--
MW-9	15	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--
MW-9	20	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--
MW-10	15	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--
MW-10	20	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--
MW-11	15	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--
MW-11	20	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--
MW-12	15	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--
MW-12	20	8/6/01	<1	<1	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.2	<0.01	--

Table 7
SOIL ANALYTICAL DATA
Former Central BP Station
2160 Central Ave.
McKinleyville, CA

Sample ID	Soil															
	Sample Depth (feet bgs)	Sample Date	TPHg (mg/Kg)	TPHd (mg/Kg)	TPHmo (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	MTBE (mg/Kg)	DIPE (mg/Kg)	TAME (mg/Kg)	ETBE (mg/Kg)	TBA (mg/Kg)	Methanol (mg/Kg)	Ethanol (mg/Kg)
Remedial Action																
VEW-1@10	10	9/24/03	1.2	2.8	--	0.022	0.035	0.025	0.17	0.0069	--	--	--	--	--	--
VEW-1@15	15	9/24/03	5,300	650	--	9.9	230	130	690	<1	--	--	--	--	--	--
VEW-1@20	20	9/24/03	21	1.5	--	1.3	3.4	0.52	2.7	0.15	--	--	--	--	--	--
VEW-2@10	10	9/24/03	1.1	5.4	--	<0.005	0.036	0.026	0.14	<0.005	--	--	--	--	--	--
VEW-2@15	15	9/24/03	180	74	--	<0.025	0.1	2.5	9.4	<0.025	--	--	--	--	--	--
VEW-2@20	20	9/24/03	1,100	67	--	7.8	37	15	67	0.28	--	--	--	--	--	--
VEW-3@10	10	9/24/03	<1	2.4	--	<0.005	<0.005	0.0095	0.0068	<0.005	--	--	--	--	--	--
VEW-3@15	15	9/24/03	470	280	--	0.99	20	23	89	<0.1	--	--	--	--	--	--
VEW-3@20	20	9/24/03	2.7	2.6	--	0.027	0.28	0.059	0.25	<0.005	--	--	--	--	--	--
VEW-4@10	10	9/24/03	390	220	--	<0.05	<0.05	1.2	6.4	<0.005	--	--	--	--	--	--
VEW-4@15	15	9/24/03	10,000	1,500	--	11	290	180	780	<5	--	--	--	--	--	--
VEW-4@20	20	9/24/03	9.9	1.4	--	1	1.6	0.19	1	0.01	--	--	--	--	--	--
VEW-5@15	15	9/24/03	130	60	--	<0.025	<0.025	0.33	0.37	<0.025	--	--	--	--	--	--
VEW-5@20	20	9/24/03	1.1	<1	--	0.032	0.14	0.035	0.12	<0.005	--	--	--	--	--	--

Notes:

mg/Kg = milligrams per kilogram = ppm = parts per million

--: Not analyzed, available, or applicable

TPHmo: Total Petroleum Hydrocarbons as Motor Oil by Method 3550/8015M

TPHd: Total Petroleum Hydrocarbons as Diesel by Method 3550/8015M

TPHg: Total Petroleum Hydrocarbons as Gasoline by Method 8260B

Benzene: by Method 8260B

Toluene: by Method 8260B

Ethylbenzene: by Method 8260B

Xylenes: by Method 8260B

MTBE: Methyl Tertiary Butyl Ether by Method 8260B

DIPE: Di-Isopropyl Ether by Method 8260B

TAME: Tertiary Amyl Methyl Ether by Method 8260B

ETBE: Ethyl Tertiary Butyl Ether by Method 8260B

TBA: Tertiary Butyl Alcohol by Method 8260B

Methanol: by Method 8260B

Ethanol: by Method 8260B

Total Lead: by EPA 200.9

APPENDIX A

DAILY FIELD REPORT

PAGE ____ OF ____

Project Number: NC-24

Date:

316106

Site Name: *PICO*

Field Personnel: James Linderman

Site Address: 2160 Central Ave. McKinleyville Proj. Manager Andrew LaCicero

Scope of work 1QT06 GWS

Drum Inventory Soil:

Water: $3 + \frac{1}{2}$

Free product:

Additional Comments:

GAGING DATA/PURGE CALCULATIONS

Job No.: NC-24 Location: 2160 Central Ave. Date: 3/6/06 Tech(s): JL

Explanation:

DIA. = Well Diameter

DTB = Depth to Bottom

DTW = Depth to Water

ST = Saturated Thickness (DTB-DTW)

CV = Casing Volume (ST x cf)

PV = Purge Volume (standard 3 x CV,

SPH = Thickness of Separate Phase Hydrocarbons

Conversion Factors (cf):

2 in. dia. well cf = 0.16 gal./ft.

4 in. dia. well cf = 0.65 gal./ft.

6 in. dia. well cf = 1.44 gal./ft.



BLUE ROCK
ENVIRONMENTAL, INC.

PURGING DATA

SHEET 1 OF 4

Job No.: NC-24 Location: 2160 Central Ave. Date: 3/6/06 Tech: JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-1			--	--	--	Sample for:
Calc. purge volume	11:30	0.25	103	57.4	6.20	TPHg TPHd 8260
	11:35	2.75	78	56.7	5.85	BTEX MTBE Metals
5.61	11:40	5.60	76	56.6	5.81	Purging Method:
						PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen

clear/mod./mod./no sheen/no odor

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-2			--	--	--	Sample for:
Calc. purge volume	11:50	0.25	92	57.0	5.53	TPHg TPHd 8260
	11:55	3.25	87	57.0	5.52	BTEX MTBE Metals
6.21	12:00	6.25	87	57.2	5.51	Purging Method:
						PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen

clear/heavy/mod./no sheen/no odor

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-3			--	--	--	Sample for:
Calc. purge volume	12:10	0.25	66	54.3	5.98	TPHg TPHd 8260
	12:15	3.00	100	53.8	5.64	BTEX MTBE Metals
6.18	12:20	6.20	99	53.6	5.65	Purging Method:
						PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen

Clear/mod/mod/no sheen/no odor

Sample at:

12:25